

DOCUMENT RESUME

ED 219 082

IR 050 065

AUTHOR Brandhorst, Ted, Ed.; And Others
TITLE ERIC Processing Manual. Rules and Guidelines for the Acquisition, Selection, and Technical Processing of Documents and Journal Articles by the Various Components of the ERIC Network.
INSTITUTION Educational Resources Information Center (ED/NIE), Washington, D.C.; ERIC Processing and Reference Facility, Bethesda, Md.; ORI, Inc., Bethesda, Md. Information Systems Div.
SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
PUB DATE Sep 80
CONTRACT 400-81-0003
NOTE 885p.: Supersedes previous edition ED 092 164. Loose-leaf, updated continuously. All revised and additional pages issued through July 1987 have been included in this copy. See related documents, IR 050 066-073.
AVAILABLE FROM ERIC Processing and Reference Facility, 4350 East-West Highway, Suite 1100, Bethesda, MD 20814 (\$40.00).
EDRS PRICE MF05/PC32 Plus Postage.
DESCRIPTORS *Abstracting; *Cataloging; Databases; Documentation; *Indexing; *Information Processing; Information Storage; Information Systems; Lexicography; Library Science; *Library Technical Processes; *Thesauri
IDENTIFIERS *ERIC

ABSTRACT

This loose-leaf manual provides the detailed rules, guidelines, and examples to be used by the components of the Educational Resources Information Center (ERIC) Network in acquiring and selecting documents and in processing them (i.e., cataloging, indexing, abstracting) for input to the ERIC computer system and subsequent announcement in "Resources in Education" and "Current Index to Journals in Education." It also covers the procedures to be followed in maintaining the indexing vocabularies (the "Thesaurus of ERIC Descriptors" and the "Identifier Authority List"). The major sections of the manual are entitled: Acquisitions, Selection, Handling and Shipping, Cataloging, Abstracting/Annotating, Indexing, Vocabulary Development and Maintenance (Part 1 - Descriptors, Part 2 - Identifiers), Database Changes (Post Publication). There are two appendixes: ERIC Clearinghouse Scope of Interest Guide; Glossary of Terms. This manual will be of interest to all organizations that use the ERIC database. A detailed index facilitates its use. (TB)

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ED 219 082



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

ORIGINALLY ISSUED SECTION-BY-SECTION BEGINNING
September 1980
THIS COPY HAS BEEN UPDATED BY THE INCLUSION OF
ALL REVISED AND ADDITIONAL PAGES ISSUED FROM
SEPTEMBER 1980 THROUGH JULY 1987

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

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*Deferred indefinitely, until present multiplicity of techniques evolve to a single unified method.

Preface

Organization, Audience, and Availability of the ERIC Processing Manual (EPM)

Organization

The *ERIC Processing Manual (EPM)* is organized into ten (1) major Sections, each dealing with a major functional work area in the development of the ERIC data base. The Table of Contents immediately following this Preface lists these Sections. Each is designed as an independent module that contains all that is necessary to perform the function involved.

There are two supporting appendices, one providing subject scope statements for each ERIC Clearinghouse (to be used in assigning documents to Clearinghouses and transferring documents between Clearinghouses); and one providing definitions for various technical terms used throughout the EPM.

A comprehensive subject index provides easy access to the content of all Sections.

Audience

The *ERIC Processing Manual (EPM)* is intended primarily for the use of the ERIC Clearinghouses (currently there are 16) engaged in acquiring, selecting, and processing (cataloging, indexing, abstracting) bibliographic material for the ERIC data base. Since the ERIC Clearinghouses are geographically separated, it is necessary to have a single set of printed guidelines in order to achieve standardized inputs from all Clearinghouses and an internally consistent data base.

The EPM is not intended as a guide to the internal centralized functions of the ERIC Processing and Reference Facility, although it deals with many of these functions that it is essential Clearinghouses know, e.g., pagination procedures, vocabulary maintenance procedures, etc.

The EPM will be of interest to some users in that it deals in detail with the construction of the data base from which those users conduct retrieval operations. The kinds of documents that are selected for ERIC, the definitions of the individual data elements cataloged, the rules for indexing and abstracting—all these are matters that affect retrieval and knowledge of which can improve retrieval.

Availability

The *ERIC Processing Manual* (EPM) can be purchased in paper copy from the ERIC Processing and Reference Facility for \$40 (domestic postage paid). Since revised pages are issued periodically, the EPM purchased at any given time will be up-to-date only as of that point in time.

A copy of the EPM is being entered into the ERIC data base where it will acquire an ED accession number (not available as of this writing) and be announced in *Resources in Education* (RIE). When announced it will be available in both microfiche and paper copy blowback from the microfiche from the ERIC Document Reproduction Service (EDRS). The copy announced in RIE will be up-to-date as of that point in time.

Revision Process

Since the *ERIC Processing Manual* is a working document, constantly in use to provide the rules and conventions by which the ERIC data base is constructed, it is constantly being modified to meet new problems, provide additional elaboration, and to be responsive to changes in priorities. All suggestions for change should be directed to the Editor, *ERIC Processing Manual*.

Revised pages are prepared and distributed to the Clearinghouses on an as needed basis. In the course of a year an average of 25 pages may be revised. Each revised page is dated in the following way in order to distinguish it from the page it replaces, e.g., "Revised December 1982." In addition, parallel lines are placed in the right hand margin in order to identify the material changed in the revision.

Shelf copies of the individual sections all receive the revised pages at the time they are printed. However, because of the wide distribution of the EPM both domestically and abroad, it is not possible for ERIC to automatically provide revised pages to all previous recipients of the EPM.

Approximately every five years the number of revision pages added to the EPM becomes such that a general revision is done in order to smooth rough edges and integrate material between Sections. At that time, a totally new edition is usually prepared. The last edition of the EPM was dated 1974 and was accessioned as ED-092 164. This present edition started in 1980, with the last Section being issued in 1982, and was accessioned as ED-

AUTHORSHIP

The *ERIC Processing Manual* (EPM) has been prepared by the staff of the ERIC Processing and Reference Facility under the general editorship of its Director, Ted Brandhorst. The Sections on "Acquisitions" and "Selection" were prepared by Grace Sundstrom, Acquisitions Librarian. The Section on Vocabulary Development and Maintenance — Descriptors was prepared by Jim Houston, Lexicographer. The equivalent Section on Identifiers was prepared by Carolyn Weller, Special Projects Coordinator. The Index was prepared by Elizabeth Pugh, Administrative Assistant.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 1 — INTRODUCTION

October 1980

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION I: INTRODUCTION

INTRODUCTION

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I. INTRODUCTION

A. General

The objective of this Section is to introduce the six major components that make up the ERIC system. As shown in Figure I-1, these are:

- Central ERIC;
- ERIC Clearinghouses;
- ERIC Processing and Reference Facility Contractor;
- CIJE Contractor;
- ERIC Document Reproduction Service (EDRS);
- U.S. Government Printing Office (GPO).

The GPO is, in effect, the printing contractor for *Resources in Education*. (Full mailing addresses, telephone numbers, and the names of major staff for each of these organizations, except GPO, may be found in the *ERIC Directory*, which is revised every six months and distributed to all ERIC components).

Each organization is described briefly in this introduction, highlighting its major functions and responsibilities. The remainder of the *ERIC Processing Manual* consists of detailed procedures and guidelines for the ERIC Clearinghouses in the performance of certain of these functions, together with various supporting Appendixes. The internal procedures of the ERIC Facility, ERIC Document Reproduction Service, CIJE Contractor, and Central ERIC are specifically not covered by this manual. Processing interactions among the system components are depicted schematically in Figure I-2. An historical introduction to the entire ERIC system, providing some background and explanation for the present decentralized structure, is given as Figure I-3.

B. ERIC System Components

1. Central ERIC

Central ERIC
National Institute of Education
Washington, D.C. 20208

Central ERIC is located within the National Institute of Education (NIE), U.S. Department of Education, and acts as the funding source, policy maker, manager, and technical director of the ERIC system. Activities of all other components of the system are monitored by Central ERIC to ensure quality products and services. All questions relating to basic ERIC policies should be directed to Central ERIC.

ERIC System Components

SYSTEM MANAGEMENT

Central ERIC
(At NIE)

CLEARINGHOUSES

Adult, Career,
& Vocational
Education

Counseling
& Personnel
Services

Educational
Management

Elementary &
Early Childhood
Education

Handicapped
& Gifted
Children

Higher
Education

Information
Resources

Junior
Colleges

Languages
& Linguistics

Reading &
Communication
Skills

Rural
Education &
Small Schools

Science,
Mathematics, &
Environmental
Education

Social Studies/
Social Science
Education

Teacher
Education

Tests,
Measurement,
& Evaluation

Urban
Education

SYSTEM SERVICES

CIJE
Contractor

ERIC
Processing
& Reference
Facility

ERIC
Document
Reproduction
Service
(EDRS)

Government
Printing Office
(GPO)

On-Line
Retrieval
Vendors
(BRS, Lockheed,
SDC, etc.)

USERS

Researchers

Administrators

Teachers

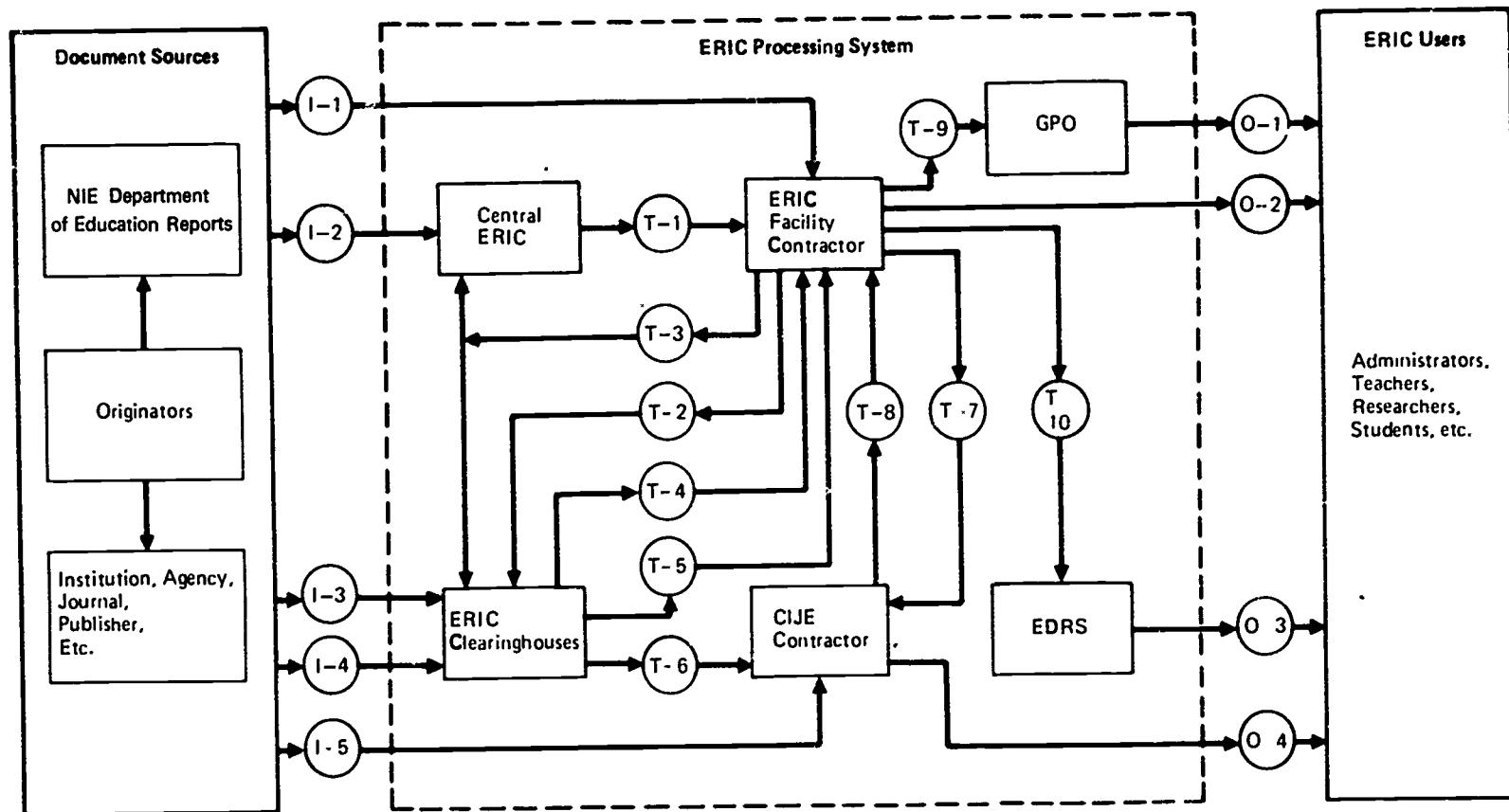
Planners

Counselors

Students

FIGURE I-1: ERIC SYSTEM COMPONENTS

I-3



I Major Inputs

- I-1 Facility Acquisitions Program Receipts (Documents Received via Specific Requests or Automatic Arrangements)
- I-2 NIE and the Department of Education Reports Generated By Contractors and Grantees (and Released By Project Officer)
- I-3 Documents Acquired By Clearinghouses via Specific Request or Automatic Request
- I-4 Education Journals Within the Scope of Specific Clearinghouses
- I-5 Education Journals of a General Nature and Not Within the Scope of Any One Clearinghouse

T Major Intra-System Transfers

- T-1 Documents (Released by Project Officers) To Be Assigned to Clearinghouses
- T-2 Documents That Pass Initial Facility Selection Criteria, and that are Within Subject Scope Assigned to Clearinghouses on the Basis of Individual Clearinghouse Scope of Interest Statements
- T-3 Acquisitions Data Reports, Working Copies of Thesaurus and Source Directory, CH/ED Cross-Reference List, Title Index, and other internal tools

- T-4 accessioned and Processed Documents and Resumes
- T-5 accessioned, but not Processed Documents (for full processing by Facility)
- T-6 Journal Article Resumes (completed)
- T-7 Thesaurus Tapes, RIE Tapes
- T-8 CIJE Tape (In ERIC format)
- T-9 RIE Tape (Videocomp format)
- T-10 accessioned Documents and Single Frame Resumes

O Major Outputs

- O-1 RIE Sales and Distribution
- O-2 ERIC TAPES/ERICTOOLS Sales and Distribution
- O-3 Microfiche and Hard Copy Sales and Distribution
- O-4 CIJE Sales and Distribution

FIGURE I-2: ERIC SYSTEM—PROCESSING INTERACTIONS

ERIC

EDUCATIONAL RESOURCES INFORMATION CENTER*

ERIC stands for Educational Resources Information Center. ERIC was originally conceived in the U.S. Office of Education in the mid-1960's as a system for providing ready access to educational literature. At the time ERIC was first discussed, the literature of education was uncontrolled. Research reports, submitted to OE by their contractors and grantees, received an initial scattered distribution and then disappeared. Reports from other sources generally remained equally inaccessible. ERIC was intended to correct this chaotic situation and to provide a foundation for subsequent information analysis activities and attempts to spread the use of current developments.

Because of the decentralized nature of American education, education's many specializations, and the existence of numerous professional organizations, ERIC's designers opted for a network of organizations rather than a single monolithic information center located in Washington. ERIC was conceived, therefore, as a network of "clearinghouses," located across the country in "host" organizations that were already naturally strong in the field of education in which they would operate.

Contracts with clearinghouses originally gave them responsibility for acquiring and selecting all documents in their area and for "processing" these documents. "Processing" includes the familiar surrogation activities of cataloging, indexing, and abstracting. This scheme has worked out very well. Virtually all observers of ERIC have concluded over time that the network of clearinghouses does a better job of ferreting out the current literature of education than one single information center in Washington could ever do. With their specialized subject expertise, clearinghouse staff are well qualified to manage ERIC document selection functions. Decentralization has paid off as well for information analysis and user service activities. However, decentralization was not the complete answer. In order to generate products that included the output of all network components, information gathered by the clearinghouses had to be assembled at one central place. ERIC's final design, therefore, included decentralized clearinghouse operations integrated around a central computerized facility which serves as a switching center for the network. The data recorded by each of the clearinghouses is sent to the facility to form a central data base from which publications and indexes are produced.

Similar arrangements are used to supply the public with copies of reports added to the system. A basic decision for ERIC was to make documents available from a central source instead of just informing users that a given document existed. It was, therefore, necessary to provide a document reproduction service where any non-copyrighted document announced could be obtained. (When permission is obtained, copyrighted materials are also reproduced.) In other words, ERIC was developed as a complete document announcement and retrieval service.

Both of these centralized services had entrepreneurial aspects. The Government obviously could not afford to subsidize every user's document needs. The document reproduction effort had to become self-supporting or it would become too expensive within Federal budgets. Therefore, users had to pay for reports they wanted. In the same way, dissemination of the data base is not subsidized by the taxpayer; persons wanting ERIC magnetic tapes are required to meet order processing, tape, and duplication costs. The Federal Government limits its investment in both areas by generating a fundamental data base and then permitting the private sector to market it at prices as advantageous to the public as possible.

In support of this strategy, and also because central facility operations depended on use of advanced technologies (computerized photocomposition and microreprographic technology), these functions were located in the commercial sector.

*Now located within:
National Institute of Education (NIE)
Department of Education
Washington, D.C. 20208

FIGURE I-3: ERIC—A PROFILE (Page 1 of 2)

ERIC, therefore, emerges as a network with four levels. The first or Governmental level is represented by NIE and Central ERIC (the funder, policy setter, and monitor). The second or non-profit level is made up of 16 Clearinghouses located at universities or professional societies. The third or commercial level consists of the centralized facilities for managing the data base, putting out published products, making microfiche, and reproducing documents. Fourth and last are the users who receive the benefit of these activities.

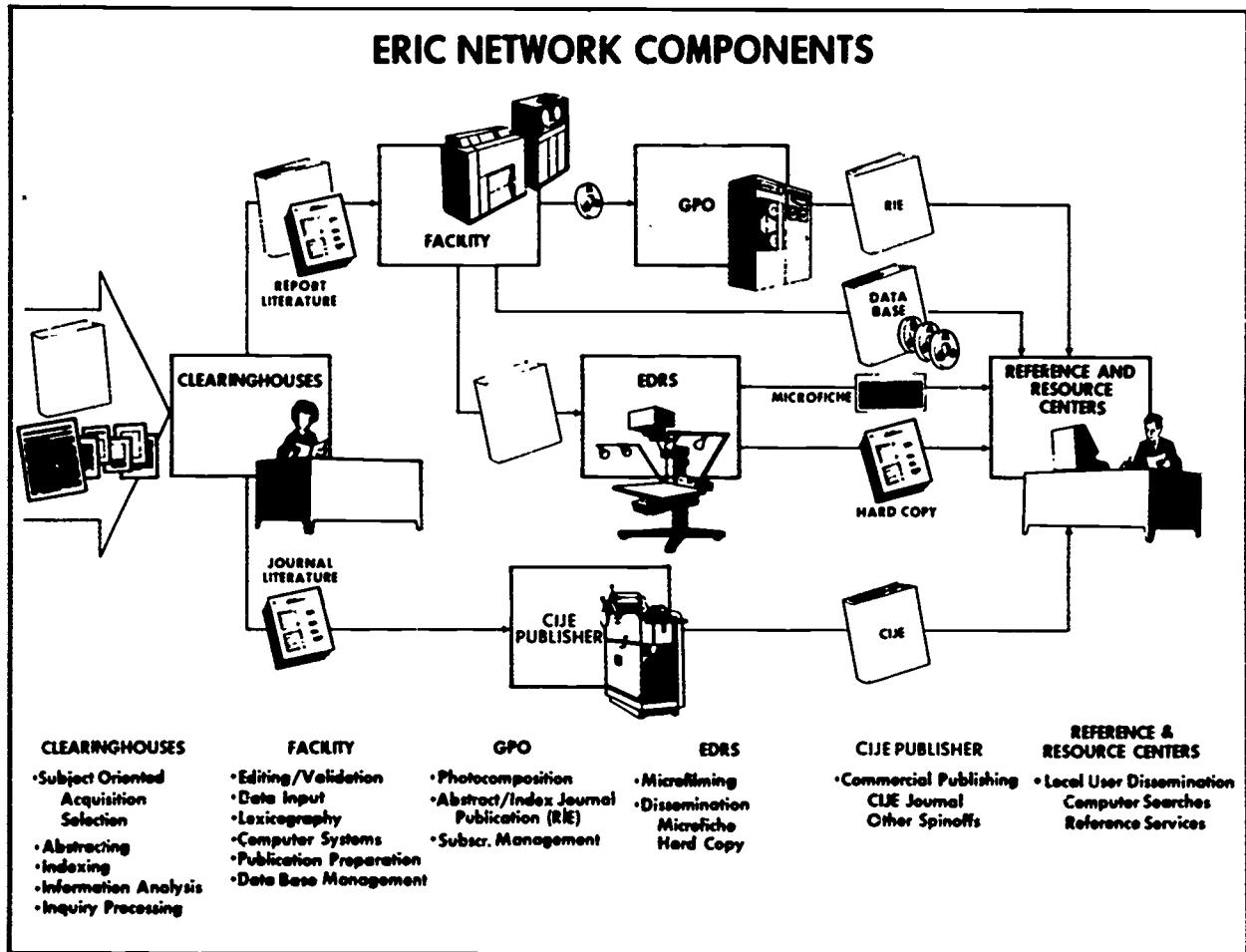


FIGURE I-3: ERIC—A PROFILE (Page 2 of 2)

2. ERIC Clearinghouses

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular scope, selecting the highest quality and most relevant material, and processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base. It is the above procedures that are covered by this Manual. In addition, Clearinghouses provide reference and retrieval services; develop information analysis products, conduct workshops and make presentations, and generate other types of communication links with the educational community. These latter functions are not covered by this Manual.

There are currently sixteen ERIC Clearinghouses located at various points across the United States, each housed at a non-profit institution. The exact number of Clearinghouses has fluctuated over time, in response to changing educational needs and policies.

The major Clearinghouse functions covered by this Manual can be listed as follows:

- Acquisitioning Resource Materials (Reports and Journal Articles)
- Handling and Shipping
- Selection/Evaluation (Input Screening)
 - Duplicate Checking
 - Reproducibility/Legibility Checking
 - Copyright Checking
 - Level of Processing Determination
 - Labeling (Policy and Copyright labels)
 - Accessioning (Logging, Assigning Number)
- Document Processing
 - Descriptive Cataloging
 - Abstracting
 - Indexing
- Vocabulary Maintenance (Suggesting New Index Terms)

The major Clearinghouse functions *not* covered by this Manual can be briefly elaborated upon as follows:

- Providing Reference and Retrieval Services

Reference assistance and retrieval services are provided to individual users. This may include literature searches/bibliographies (computer or manual), identification of sought-after documents, referrals to sources of information (such as summaries, state-of-the-art studies,

or even other data bases, such as NTIS, NASA, DDC, University Microfilms, etc.). Information regarding the ERIC system and how to utilize it is also provided.

- Developing Information Analysis Products

Information analysis products are publications that may include research reviews, papers summarizing or synthesizing given topics, bibliographies (annotated and unannotated), state-of-the-art papers, guides to a field or to the literature of a field, etc. The particular products developed by a given Clearinghouse will depend on such factors as the user group served, priorities established by Clearinghouse staff, Clearinghouse Advisory Board input, Central ERIC and NIE requests and initiatives, etc.

- Conducting Workshops and Presentations

Clearinghouses conduct workshops and make presentations on how to use the ERIC System and the products generated by the system (including both basic reference tools such as RIE and CIJE, and information analysis products). Education of the user community in order to extend and improve system use is a constant activity.

- Developing and Maintaining Linkages with User Groups

A number of communication links, procedures, and products have been established by Clearinghouses to provide information to users and to obtain materials from them, e.g., newsletters, articles, regular journal columns, conference participation (including exhibit booths), etc. Professional associations and the various intermediate information transfer units are very helpful in achieving these Clearinghouse objectives.

Each Clearinghouse is identified by a two-character alphabetic prefix and all documents and journal articles processed by the ERIC Clearinghouses for Resources in Education (RIE) or Current Index to Journals in Education (CIJE) are assigned Clearinghouse Accession Numbers that begin with these prefixes. A complete list of all prefixes used to date (and therefore all Clearinghouses that have existed) appears in Figure I-4.

Figure I-5 is a complete list of all currently operating ERIC Clearinghouses sequenced by their name. A brief indication of the scope of interest of each Clearinghouse is also included. The ERIC Directory provides complete mailing addresses, telephone numbers, and staff names and titles for all Clearinghouses. Appendix A provides a detailed guide to the subject matter and topical areas covered by each Clearinghouse.

PREFIX	CLEARINGHOUSE	STATUS
AA	ERIC Facility Contractor (For RIE) CIJE Contractor (For CIJE)	Current
AC	Adult Education .	(Merged into CE in 1973)
AL	Linguistics	(Merged into FL in 1971)
CE	Adult, Career, and Vocational Education	Current
CG	Counseling and Personnel Services	Current
CS	Reading and Communication Skills	Current
EA	Educational Management	Current
EC	Handicapped and Gifted Children	Current
EF	Educational Facilities	(Merged into EA in 1970)
EM	Educational Media and Technology	(Merged into IR in 1974)
FL	Languages and Linguistics	Current
HE	Higher Education	Current
IR	Information Resources	Current
JC	Junior Colleges	Current
LI	Library and Information Sciences	(Merged into IR in 1974)
PS	Elementary and Early Childhood Education	Current
RC	Rural Education and Small Schools	Current
RE	Reading	(Merged into CS in 1972)
SE	Science, Mathematics, and Environmental Education	Current
SO	Social Science/Social Studies	Current
SP	Teacher Education	Current
TE	Teaching of English	(Merged into CS in 1972)
TM	Tests, Measurement, and Evaluation	Current
UD	Urban Education	Current
VT	Vocational and Technical Education	(Merged into CE in 1973)

FIGURE I-4: ERIC CLEARINGHOUSES—A COMPLETE LIST (WITH PREFIXES)



CLEARINGHOUSES (and Other Network Components)

ERIC Ready Reference #6
Revised April 1987

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The exact number of Clearinghouses has fluctuated over time in response to the shifting needs of the educational community. There are currently 16 Clearinghouses. These are listed below, together with full addresses, telephone numbers, and brief scope notes describing the areas they cover.

ERIC Clearinghouse on Adult, Career, and Vocational Education (CE)

Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210-1090
Telephone: (614) 486-3655; (800) 848-4815

All levels and settings of adult and continuing, career, and vocational/technical education. Adult education, from basic literacy training through professional skill upgrading. Career education, including career awareness, career decisionmaking, career development, career change, and experience-based education. Vocational and technical education, including new subprofessional fields, industrial arts, corrections education, employment and training programs, youth employment, work experience programs, education/business partnerships, entrepreneurship, adult retraining, and vocational rehabilitation for the handicapped.

ERIC Clearinghouse on Counseling and Personnel Services (CG)

University of Michigan
School of Education, Room 2108
610 East University Street
Ann Arbor, Michigan 48109-1259
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings; theoretical development of counseling and guidance; personnel procedures such as testing and interviewing and the analysis and dissemination of the resultant information; group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

ERIC Clearinghouse on Educational Management (EA)

University of Oregon
1787 Agate Street
Eugene, Oregon 97403-5207
Telephone: (503) 686-5043

The leadership, management, and structure of public and private educational organizations; practice and theory of administration; pre-service and inservice preparation of administrators; tasks and processes of administration; methods and varieties of organization and organizational change; and the social context of educational organizations.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

ERIC Clearinghouse on Elementary and Early Childhood Education (PS)

University of Illinois
College of Education
805 W. Pennsylvania Avenue
Urbana, Illinois 61801-4897
Telephone: (217) 333-1386

The physical, cognitive, social, educational, and cultural development of children from birth through early adolescence; prenatal factors; parental behavior factors; learning theory research and practice related to the development of young children, including the preparation of teachers for education at level; educational programs and community services for preschool; and theoretical and philosophical issues pertaining to children's development and education.

ERIC Clearinghouse on Handicapped and Gifted Children (EC)

Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091-1589
Telephone: (703) 620-3660

All aspects of the education and development of the handicapped and gifted, including prevention, identification and assessment, intervention, and enrichment, both in special settings and within the mainstream.

ERIC Clearinghouse on Higher Education (HE)

George Washington University
One Dupont Circle, N.W., Suite 630
Washington, D.C. 20036-1183
Telephone: (202) 296-2597

Topics relating to college and university conditions, problems, programs, and students. Curricular and instructional programs, and institutional research at the college or university level. Federal programs, professional education (medicine, law, etc.), professional continuing education, collegiate computer-assisted learning and management, graduate education, university extension programs, teaching-learning, legal issues and legislation, planning, governance, finance, evaluation, interinstitutional arrangements, management of institutions of higher education, and business or industry educational programs leading to a degree.

ERIC Clearinghouse on Information Resources (IR)

Syracuse University
School of Education
Huntington Hall, Room 030
150 Marshall Street
Syracuse, New York 13244-2340
Telephone: (315) 423-3640

Educational technology and library and information science at all levels. Instructional design, development, and evaluation are the emphases within educational technology, along with the media of educational communication: computers and microcomputers, telecommunications (cable, broadcast, satellite), audio and video recordings, film and other audiovisual materials, as they pertain to teaching and learning. Within library and information science the focus is on the operation and management of information services for education-related organizations. All aspects of information technology related to education are considered within the scope.

ERIC Clearinghouse for Junior Colleges (JC)

University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024-1564
Telephone: (213) 825-3931

Development, administration, and evaluation of two-year public and private community and junior colleges, technical institutes, and two-year branch university campuses. Two-year college students, faculty, staff, curricula, programs, support services, libraries, and community services. Linkages between two-year colleges and business/industrial organizations. Articulation of two-year colleges with secondary and four-year postsecondary institutions.

ERIC Clearinghouse on Languages and Linguistics (FL)

Center for Applied Linguistics

1118 22nd Street, N.W.

Washington, D.C. 20037-0037

Telephone: (202) 429-9551

Languages and language sciences; theoretical and applied linguistics; all areas of foreign language, second language, and linguistics instruction, pedagogy, or methodology; psycholinguistics and the psychology of language learning; cultural and intercultural context of languages; application of linguistics in language teaching; bilingualism and bilingual education; sociolinguistics; study abroad and international exchanges; teacher training and qualifications specific to the teaching of foreign languages and second languages; commonly and uncommonly taught languages, including English as a second language; related curriculum developments and problems.

ERIC Clearinghouse on Reading and Communication Skills (CS)

National Council of Teachers of English

1111 Kenyon Road

Urbana, Illinois 61801-1096

Telephone: (217) 328-3870

Reading, English, and communication skills (verbal and nonverbal), preschool through college; educational research and instruction development in reading, writing, speaking, and listening; identification, diagnosis, and remediation of reading problems; speech communication (including forensics), mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching; instructional materials, curricula, tests/measurement, and methodology at all levels of reading; the role of libraries and other agencies in fostering and guiding reading; diagnostics and remedial reading services in schools and clinical settings. Preparation of reading teachers and specialists.

ERIC Clearinghouse on Rural Education and Small Schools (RC)

New Mexico State University

Computer Center (Room 218), Stewart Street

Department 3AP, Box 30001

Las Cruces, New Mexico 88003-0001

Telephone: (505) 646-2623

Economic, cultural, social, or other factors related to educational programs and practices for rural residents; American Indians/Alaska Natives, Mexican Americans, and migrants; educational practices and programs in all small schools; outdoor education.

ERIC Clearinghouse for Science, Mathematics, and Environmental Education (SE)

Ohio State University

1200 Chambers Road, Room 310

Columbus, Ohio 43212-1792

Telephone: (614) 292-6717

Science, mathematics, and environmental education at all levels, and within these three broad subject areas, the following topics: development of curriculum and instructional materials; teachers and teacher education; learning theory/outcomes (including the impact of parameters such as interest level, intelligence, values, and concept development upon learning in these fields); educational programs; research and evaluative studies; media applications; computer applications.

ERIC Clearinghouse for Social Studies/Social Science Education (SO)

Indiana University

Social Studies Development Center

2805 East 10th Street

Bloomington, Indiana 47405-2373

Telephone: (812) 335-3838

All levels of social studies and social science education; content of the social science disciplines; applications of theory and research to social science education; contributions of social science disciplines (anthropology, economics, geography, history, sociology, social psychology, political science); education as a social science; comparative education (K-12); content and curriculum materials on "social" topics such as law education, ethnic studies, bias and discrimination, aging, adoption, men's equity, and sex education.

ERIC Clearinghouse on Teacher Education (SP)

American Association of Colleges for Teacher Education

One Dupont Circle, N.W., Suite 610

Washington, D.C. 20036-2412

Telephone: (202) 293-2450

School personnel at all levels; teacher selection and training, preservice and inservice preparation, and retirement; the theory, philosophy, and practice of teaching; curricula and general education not specifically covered by other clearinghouses; all aspects of physical education, health education, and recreation education.

ERIC Clearinghouse on Tests, Measurement, and Evaluation (TM)

Educational Testing Service

Rosedale Road

Princeton, New Jersey 08541-0001

Telephone: (609) 734-5176

Tests and other measurement devices; methodology of measurement and evaluation; application of tests, measurement, or evaluation in educational projects or programs; research design and methodology in the area of testing and measurement/evaluation; learning theory in general.

ERIC Clearinghouse on Urban Education (UD)

Teachers College, Columbia University

Institute for Urban and Minority Education

Main Hall, Room 300, Box 40

525 W. 120th Street

New York, New York 10027-9998

Telephone: (212) 678-3433

Programs and practices in public, parochial, and private schools in urban areas and the education of particular racial/ethnic minority children and youth in various settings — local, national, and international; the theory and practice of educational equity; urban and minority experiences; and urban and minority social institutions and services.

Educational Resources Information Center (Central ERIC)

U.S. Department of Education

Office of Educational Research and Improvement (OERI)

Washington, D.C. 20208-1235

Telephone: (202) 357-6289

ERIC Processing & Reference Facility

ORI, Inc., Information Systems

4350 East-West Highway, Suite 1100

Bethesda, Maryland 20814-4475

Telephone: (301) 656-9723

ERIC Document Reproduction Service (EDRS)

Computer Microfilm Corporation (CMC)

3900 Wheeler Avenue

Alexandria, Virginia 22304-5110

Telephone: (703) 823-0500; (800) 227-3742

Oryx Press

2214 North Central Avenue at Encanto

Phoenix, Arizona 85004-1483

Telephone: (602) 254-6156; (800) 457-6799

3. Commercial Contractors

a. ERIC Processing and Reference Facility

**ERIC Processing and Reference Facility
ORI, Inc., Information Systems Division
Bethesda, Maryland 20014**

The ERIC Processing and Reference Facility is a centralized information processing facility serving all components of the ERIC network, i.e., Central ERIC, the decentralized Clearinghouses, ERIC Document Reproduction Service, CIJE Contractor. It is under the policy direction of Central ERIC. Services provided include:

- receiving and dispatch;
- document control (screening, duplicate checking, assignment, storage, special distributions, accessioning);
- document analysis (cataloging, indexing, abstracting, editorial review);
- authority list maintenance (including lexicographic analysis);
- data preparation (preparing machine-readable data, OCR scanning);
- computer processing;
- system and file maintenance;
- data base management;
- programming;
- reference responses.

The Facility prepares and delivers a variety of products and publications from the ERIC data base. These include:

- the monthly abstract journal *Resources in Education* (RIE) and its Semiannual and Annual Indexes;
- quarterly editions of the *ERIC Source Directory*;
- semiannual editions of the alphabetic, rotated, and hierarchical versions of the *Thesaurus*;
- an annual *Contract/Grant Number Index*;
- a semiannual *Report/Project Number Index*;
- an annual cumulative *Clearinghouse Number/ED Number Cross Reference List*, with monthly updates;
- *ERIC Administrative Bulletin* (EAB);
- *Interchange* (Newsletter for Users);
- *Identifier Authority List*;

- a *Title Index* to the RIE portion of the data base;
- regular updates to the *ERIC Processing Manual*;
- the *ERIC Directory*, *ERIC System Documentation*, and numerous other listings, compilations, and indexes.

Staff of the Facility serve ERIC in an advisory or consultant capacity, manage and participate in data base user meetings, and perform analyses of the data base. A heavy emphasis is placed by the Facility on scheduling, statistical reporting, and cost accounting (including unit cost reports), for purposes of management control.

The current ERIC Facility contractor is ORI, Inc. The major Facility functions covered by this Manual can be listed as follows:

- Acquisitions and Assignment of Documents (For RIE)

The ERIC Facility performs an acquisitions function principally aimed at obtaining documents pertinent to the ERIC mission from Government agencies and from foreign and international organizations. For these sources of documents, the Clearinghouses are directed to work through the Facility. Documents obtained from these efforts, as well as documents originated or otherwise obtained directly by the National Institute of Education, are assigned by the Facility to the appropriate Clearinghouse in accordance with the Clearinghouse statements of scope. The Facility does not exercise an Evaluation/Selection function.

- Handling and Shipping

Each shipment of documents and resumes from the Clearinghouses is checked against the accompanying log sheet to verify completeness of the shipment. The documents are then checked to ensure attachment of the appropriate policy statements and reproduction releases. The documents/resumes are then forwarded for editing of the Clearinghouse processing work.

- Editing

Documents and completed resume forms, for which initial processing has been accomplished by the Clearinghouses, are received by the editors and checked

to ensure completeness and correctness of all entries and compliance with the provisions of the *ERIC Processing Manual*. (After editing, all data are processed into machine-readable form for subsequent computer processing to produce RIE and other products.)

- Vocabulary Maintenance

The ERIC Facility Lexicographer, with the assistance of a nationwide Vocabulary Review Group, reviews all new index terms (Descriptors and Identifiers), recommended by the Clearinghouses, approving or denying each term. Descriptor Scope Notes (definitions) and cross-reference structures are refined, if necessary. Similarly, all suggestions for changes of existing terminology are reviewed for feasibility, advisability, impact, and compliance with the "Vocabulary Development and Maintenance" section of this Manual.

The major Facility functions *not* covered by this Manual can be briefly elaborated upon as follows:

- Distribution of Documents

Includes complimentary distribution of RIE and CIJE and distribution of ERIC-related handout and exhibit materials.

- Reference Responses

General information about the ERIC system and ordering information for specific sought-after documents is provided to a wide variety of users who have directed their inquiries to NIE, OE, the Department of Education, Central ERIC, GPO, LC, etc. Appropriate referrals are also made.

- Computer Searches

Computer searches of the ERIC data base (RIE and CIJE) are made at the request of Central ERIC and in support of regular ERIC Facility functions, e.g., Acquisitions, Lexicography.

- Data Entry

All ERIC document data are reduced to machine-readable form for subsequent screening, editing, and computer processing. (Optical Character Recognition (OCR) is the principal technique currently used, although on-line techniques are also available.)

- Computer Processing

Data reduced to machine-readable form are used to update the ERIC magnetic tape and direct access computerized files. Publications and indexes are generated from these files via a series of computer programs (documented in the *ERIC System Documentation*).

- ERICTAPES/ERICTOOLS Projects

The ERIC Facility Contractor is authorized by Central ERIC to make the ERIC data base, and various internal ERIC reference publications, e.g., *Title Index*, available for sale to the public via a self-sustaining program not requiring Government subsidy.

b. Current Index to Journals in Education (CIJE) Contractor

Oryx Press
2214 North Central at Encanto
Phoenix, Arizona 85004

The current CIJE Contractor is Oryx Press. CIJE was begun in 1969 as a joint venture between ERIC and the commercial publishing realm. In addition to this index to journal literature in the field of education, the CIJE Contractor is expected to serve as the major commercial hardbound publisher exploiting the ERIC data base for the preparation of a variety of publications, e.g., annual RIE cumulations, *Thesaurus of ERIC Descriptors*, etc.

The major CIJE Contractor functions covered by this Manual are the following:

- Selection, Acquisition, and Assignment of Journals to be Covered by CIJE

Journals to be covered, either comprehensively or selectively, are recommended by Clearinghouses, subject to the approval of Central ERIC. Clearinghouses are assigned journals on the basis of their scope of interest. At present, journals that do not fall obviously within the scope of any Clearinghouse (e.g., too general) are processed through the CIJE Contractor.

- Input Screening

Clearinghouses ship completed resumes for journal articles to the ERIC Facility. The Facility converts the data to magnetic tape form and sends the resumes and tapes to the CIJE Contractor, where they are checked against the accompanying log sheet to verify completeness of the shipment.

- Editing

All completed journal article resumes, whether done by Clearinghouse or in-house by the CIJE Contractor, are edited to ensure accuracy, completeness, and compliance with this Manual.

The major CIJE Contractor functions not covered by this Manual can be listed as follows:

- Computer Processing
- CIJE (and Other ERIC-Related Products) Production, Marketing, Sales, Distribution

c. ERIC Document Reproduction Service (EDRS)

ERIC Document Reproduction Service (EDRS)
Computer Microfilm International, Corporation (CMIC)
Arlington, Virginia 22201

The current EDRS Contractor is Computer Microfilm International, Corporation (CMIC). EDRS is the document supply and distribution component of the ERIC network. All non-copyrighted documents (and any others for which reproduction permission has been obtained) announced in *Resources in Education* are forwarded to EDRS, where they are microfilmed and converted into microfiche (4" x 6" flat sheets of microfilm) according to Federal and national standards.

Interested users may obtain copies of ERIC documents from EDRS in either microfiche (at 24x reduction*) or paper copy form (at 100% original size). Orders are accepted on either an on-demand or subscription basis. Subscribers may order the entire microfiche collection (monthly this amounts to about 1,300 titles contained on about 1,800 microfiche) or subsets of the entire collection (such as all the titles input by a particular Clearinghouse). There are currently over 700 organizations that subscribe to the entire ERIC collection on a continuing basis. These are made up of Federal agencies, universities and colleges, state and local education agencies, school systems, professional associations, non-profit groups, etc. There are over seventy subscriptions in foreign countries. Individual users consist of teachers, students, researchers, planners, administrators, counselors, therapists, and numerous other members of the educational community.

*20x reduction was employed prior to 1972.

Each document announced in *Resources in Education* carries with it an EDRS price code (or alternate source of availability):

- Individual on-demand *microfiche* are sold at a price of \$0.83 per title as long as the document fits on five cards or less (i.e., is 479 pages or less). The price increases \$0.17 for each additional card (i.e., 96 page increment or fraction thereof) required.
- Individual on-demand *paper copies* are sold on a price scale beginning at \$1.82 for 1-25 pages and rising \$1.50 for each additional 25 page increment (or fraction thereof).

See EDRS order form for full current price information. Microfiche may be purchased on a standing order basis at a bargain price (encouraging subscriptions) that works out to less than \$0.10 per microfiche, or about \$2,000 a year for around 21,500 microfiche.

None of the functions performed by EDRS are covered by this Manual.

4. Government Printing Office

U.S. Government Printing Office
Washington, D.C. 20402

The Government Printing Office receives each month from the ERIC Facility a magnetic tape containing the contents of an issue of RIE. Using the Videocomp high-speed photocomposition device, GPO composes camera-ready made-up pages for the issue, and prints and binds sufficient copies to handle subscription, complimentary distribution, and on-demand order requirements. All subscriptions to RIE, and all initial distributions to these paid subscribers, are handled by GPO. (Complimentary distribution is handled by the ERIC Facility.) On-demand orders for single copies or the semiannual cumulative index are handled by GPO as long as the supply lasts (usually up to six months following publication). Annual cumulations of both RIE abstracts and indexes are reprinted in hardbound form by the CIJE contractor.

None of the functions performed by GPO are covered in this Manual.

C. Major ERIC Products

A large number of information products result from the effort of the various members of the ERIC network. The major products are described below, in entries designed for the reader as yet unfamiliar with ERIC. A larger list of available products (including

the major ones) appear in Figure I-6, together with information concerning frequency, publisher, price, etc. Each publisher can provide additional informational literature elaborating on particular products. Bibliographies of ERIC Information Analysis Products are prepared annually and are listed in Figure I-6.

1. Resources in Education (RIE)

RIE is a paperbound monthly (12 issues per year) abstract journal that announces reports and documents dealing with all aspects of education, i.e., research reports, program descriptions, instructional materials. RIE consists of a resume section of document abstracts, and index sections consisting of separate subject, author, institution, and publication type indexes. A paperbound semiannual index is available for January-June each year. An annual cumulation of both resumes and indexes is available from the CIJE Contractor. Each monthly issue announces approximately 1,500 items.

RIE is directed at the entire educational community, e.g., school administrators, teachers, supervisors, school board members, education researchers, students, librarians, professional educators, etc.

RIE is available from the U.S. Government Printing Office, Washington, D.C. 20402. The current annual subscription price for the journal in the U.S. is \$42.70 per year, exclusive of the semiannual cumulative index. For additional details, see Figure I-6.

2. Current Index to Journals in Education (CIJE)

CIJE is a paperbound monthly (12 issues per year) index journal that announces journal articles from over 700 education and education-related journals. CIJE is made up of a main entry section, consisting of bibliographic information and up to 50-word annotations for most articles; an index section, consisting of separate subject and author indexes; and a journal content section arranged by journal title and showing the articles accessioned from each journal issue. Semiannual cumulations are available (cumulating both the announcement section and indexes). Each issue announces approximately 1,700 items.

Like RIE, CIJE is directed at the entire educational community.

CIJE is available from Oryx Press (for current address, always consult the ERIC Directory or RIE). The subscription price for the journal in the U.S. is \$80 per year, exclusive of cumulations. For additional details, see Figure I-6.

3. Thesaurus of ERIC Descriptors

The *Thesaurus of ERIC Descriptors* contains the basic vocabulary used by the ERIC system for the indexing of documents and journal articles. It contains approximately 5,000 Main Terms and 3,500 Synonyms cross-referenced to the Main Terms. Scope Notes (definitions) or parenthetical qualifiers are provided for all non-obvious terms. Hierarchical and other relationships among terms are indicated by the standard "Narrower Term," "Broader Term," "Related Term" notations.

The *Thesaurus* is maintained and updated by the ERIC Facility, largely on the basis of inputs from the ERIC Clearinghouses. New terms and changes are made on a monthly basis and are sent to all ERIC Clearinghouses and announced in the back section of RIE and CIJE. A "Working Copy" is produced periodically by the Facility for the use of the Clearinghouse indexers. The *Thesaurus* is published (approximately every two years) for public sale by the CIJE Publisher.

4. ERIC TAPES

ERIC TAPES are magnetic tape copies of the files of bibliographic data assembled by the ERIC System. A number of different files, in a variety of formats, are offered for sale by the ERIC Facility Contractor. The most popular files are the sequential Master Files containing the records announced in *Resources in Education* and in *Current Index to Journals in Education*, however, the inverted subject index files and the *Thesaurus* file have also been widely disseminated.

The files are sold on 9-track tape reels (600-, 1200-, or 2400-foot, as appropriate), at packing densities of either 800 or 1600 BPI. The tapes are unlabeled and in IBM 360 Operating System (OS) format in EBCDIC code. Both "Upper Case Only" and "Upper and Lower Case" character sets are offered.

Detailed discussions of the various files, formats, and ordering options, along with price lists, can be obtained from the ERIC Facility Contractor.

5. Document Reproductions

a. Microfiche

A microfiche is a sheet of microfilm approximately 4" x 6", on which up to 98 pages of text are reproduced (at 24x reduction). Only the data on the header strip of a microfiche (containing accession number, title, author, etc.) are eye-legible; a special enlarging microfiche reader is necessary to read the page images.

Documents are announced in RIE at one of three possible "Levels":

- Level 1: documents are available in both microfiche and paper copy;
- Level 2: documents are available only in microfiche;
- Level 3: documents are not available at all from EDRS, but an alternate source of availability is cited in the RIE announcement.

Less than 10% of the items announced in RIE are Level 3; all others may be obtained in microfiche form from EDRS. Journal articles announced in CIJE are available from reprint services such as UMI and ISI.

A single title that will fit on five microfiche or less (i.e., 479 pages) costs \$0.83. The price increases at a rate of \$0.17 for each additional microfiche required (i.e., 96 page increment or less). Standing orders to obtain the entire ERIC collection on microfiche are available from EDRS.

b. Paper Copy (PC)

Paper Copy refers to a paper reproduction (usually at 100% of original size) of an original document. All Level 1 documents announced in RIE (about 75% of the announcements) are available from EDRS in paper copy.

Paper copy reproductions are sold on a graduated scale dependent on size. The price starts at \$1.82 for a document of 1-25 pages. See EDRS order form in most recent issue of RIE for full current price.

6. Reference Tools (Providing Access to the Data Base)

A wide variety of reference tools providing access to the ERIC Data Base are available. All significant tools are listed in Figure I-6, together with information as to frequency, publisher, price, etc.

As an example, the *Title Index* is described below:

Title Index

The *Title Index* to RIE accessions (ED number accessions) is produced in the form of an annual total cumulation*, supplemented by quarterly cumulations for the calendar year

*The *Title Index* cumulations are as follows:

- 1966-1976 Ten Year Cumulation
- 1977 - Last full year

in progress. It is a major reference tool with particular application to duplicate checking and the identification of inquiries where title is the major (if not only) data element provided.

The format includes both pagination and date of publication, as additional discriminators helpful in the case of identical titles. The pagination also permits the user to calculate the EDRS printed copy price.

The *Title Index* is available from the ERIC Facility Contractor at \$30 for the latest cumulation and \$45 for the cumulation plus a year's supplements.

ERIC Product Summary

PRODUCT	FREQUENCY	PUBLISHER/AVAILABILITY*	ISSUE PRICE**		ANNUAL SUBSCRIPTION		NOTES
			DOMESTIC	FOREIGN	DOMESTIC	FOREIGN	
1. BIBLIOGRAPHY OF PUBLICATIONS ABOUT ERIC	---	ORI	FREE	FREE	---	---	---
2. CAREER EDUCATION, AN ERIC BIBLIOGRAPHY (1973)	---	Macmillan	\$ 11.50	\$ 11.50	---	---	---
3. CLEARINGHOUSE NUMBER TO ED NUMBER CROSS-REFERENCE LIST	Annually	ORI	\$ 15.00	\$ 18.00	---	---	---
4. CONTRACT/GRAANT NUMBER INDEX	Annually	ORI	\$ 10.00	\$ 12.00	---	---	---
5. CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)							
1980 —							
Monthly Issues (12)	Monthly	Dryx Press	\$ 10.00	\$ 10.00	\$ 80.00	\$ 85.00	
Monthly with Semiannual Cumulations	Monthly	Dryx Press	---	---	\$ 150.00	\$ 160.00	
Semiannual Cumulations (2 Vols)	Semiannually	Dryx Press	---	---	\$ 80.00	\$ 85.00	
1979							
Monthly Issues (Mar.-Dec.)	Monthly	Dryx Press	---	---	\$ 65.70	\$ 70.90	
Monthly Issues (Jan.-Feb.)	Monthly	Macmillan	\$ 10.00	\$ 10.00	---	---	
1969-1978							
Monthly Issues	Monthly	Macmillan	\$ 10.00	\$ 10.00	\$ 80.00	\$ 80.00	
1975-1978							
Semiannual Cumulations	Semiannually	Macmillan	---	---	\$ 37.50/Vol.	\$ 37.50/Vol.	
1969-1974							
Annual Cumulations	Annually	Macmillan	---	---	\$ 75.00	\$ 75.00	
6. DESCRIPTOR AND IDENTIFIER USAGE REPORT	---	ERIC/SMEAC	\$ 20.00	---	---	---	
1978 Supplement	---	ERIC/SMEAC	\$ 29.00	---	---	---	
1977 Supplement	---	ERIC/SMEAC	\$ 15.00	---	---	---	
1976 Supplement	---	ERIC/SMEAC	\$ 15.00	---	---	---	
1975 Supplement	---	ERIC/SMEAC	\$ 15.00	---	---	---	
1966-1975 Accumulated Totals	---	ERIC/SMEAC	\$ 3.50	---	---	---	
7. DIRECTORIES							
Directory of ERIC Microfiche Collections	Biannually	ORI	FREE	FREE	---	---	
Directory of ERIC Search Services	Biannually	ORI	FREE	FREE	---	---	
8. DISCIPLINE AND CLASSROOM CONTROL: A SPECIAL INTEREST RESOURCE GUIDE	---	Dryx Press	\$ 7.50	\$ 7.50	---	---	
9. DRUG ABUSE: A SPECIAL INTEREST RESOURCE GUIDE	---	Dryx Press	\$ 7.50	\$ 7.50	---	---	
10. EARLY CHILDHOOD EDUCATION: AN ERIC BIBLIOGRAPHY (1973)	---	Macmillan	\$ 11.50	\$ 11.50	---	---	
11. EDUCATIONAL DOCUMENTS ABSTRACTS							
1979 (2 volumes)	---	Dryx Press	\$ 80.00	\$ 85.00	---	---	
1978 (2 volumes)	---	Macmillan	\$ 75.00	\$ 75.00	---	---	
1977 (2 volumes)	---	Macmillan	per annual	per annual	---	---	
1976 (2 volumes)	---	Macmillan			---	---	
1975	---	Macmillan			---	---	
1974	---	Macmillan			---	---	
1973	---	Macmillan			---	---	
1972	---	Macmillan			---	---	
1971	---	Macmillan			---	---	
1970	---	Macmillan			---	---	
1969	---	Macmillan			---	---	
1968	---	Macmillan			---	---	
12. EDUCATIONAL DOCUMENTS INDEX							
1979 (1 volume)	---	Dryx Press	\$ 47.50	\$ 50.00	---	---	
1978 (1 volume)	---	Macmillan	\$ 45.00	\$ 45.00	---	---	
1977 (1 volume)	---	Macmillan	per annual	per annual	---	---	
1976 (1 volume)	---	Macmillan			---	---	
1975 (1 volume)	---	Macmillan			---	---	
1974 (1 volume)	---	Macmillan			---	---	
1973 (1 volume)	---	Macmillan			---	---	
1972 (1 volume)	---	Macmillan			---	---	
1970-1971 (1 volume)	---	Macmillan			---	---	
1966-1969 (2 volumes)	---	Macmillan	\$ 70.00	\$ 70.00	---	---	

*Complete addresses for all publishers are listed on page 3.

**Dryx Prices include postage. Macmillan prices do not include postage.

FIGURE I-6: ERIC PRODUCT SUMMARY (Page 1 of 3)

ERIC Product Summary (Cont'd.)

PRODUCT	FREQUENCY	PUBLISHER/ AVAILA- BILITY*	ISSUE PRICE**		ANNUAL SUBSCRIPTION		NOTES
			DOMESTIC	FOREIGN	DOMESTIC	FOREIGN	
13. EDUCATIONAL DOCUMENTS INDEX — INSTITUTIONS 1966-71	---	Macmillan	\$ 20.00	\$ 20.00	---	---	
14. EDUCATIONAL FINANCE, AN ERIC BIBLIOGRAPHY (1972)	---	Macmillan	\$ 9.95	\$ 9.95	---	---	\$9.95 Paperbound.
15. ERIC INFORMATION ANALYSIS PRODUCTS (IAP's)	Annual						
1967-1972 1968 (ED-029161) 1969 (ED-034089) 1970 (ED-041598) 1971 (ED-054827) 1972 (ED-077512) 1973 (ED-087411) 1974-1975 (ED-126856) 1976-1977 (ED-168608) 1978 (ED-180499)		Macmillan	\$ 16.50 See Note	\$ 16.50 See Note	---	---	Five-Year Cumulation. Available from EDRS at Standard MF/PC Prices. " " " " " "
16. ERIC PROCESSING MANUAL (ED-092164) (544 pages)	---	EDRS	See Note	---	---	---	\$1.00 MF; \$33.32 HC, Plus Postage.
17. ERICTAPES							
ERIC Linear Files	Monthly Quarterly Annually	ORI	\$525.00- 975.00	\$560.00- 1040.00	\$150.00- 650.00	\$160.00- 720.00	Prices dependent on technical speci- fication, options, and frequency of updates (monthly, quarterly, annually available). Index (inverted files) and Thesaurus file also available. Write for brochure, provid- ing details.
CJUE Linear Files		ORI	\$300.00- 375.00	\$320.00- 400.00	\$125.00- 620.00	\$130.00- 660.00	
18. HARD COPY DOCUMENTS (ON DEMAND)	On Demand	EDRS	See Note	See Note	---	---	Pages: 1- 25 = \$1.82 26- 50 = \$3.32 51- 75 = \$4.82 76-100 = \$6.32 1.50 for each addi- tional 25 page In- crement, or por- tion thereof. Plus Postage.
19. INSTITUTIONAL SOURCES							
Alphabetic Directory Statistics and Postings	Quarterly Semiannually	ORI	\$ 12.00 \$ 35.00	\$ 17.00 \$ 41.00	\$ 45.00 \$ 60.00	\$ 50.00 \$ 72.00	---
20. LEVEL III LIST (Cumulation through April 1978)	-	ORI	\$ 6.00				
21. LIBRARY AND INFORMATION SCIENCES, AN ERIC BIBLIOGRAPHY	---	Macmillan	\$ 11.50	\$ 11.50	---	---	---
22. MICROFICHE							
Monthly Subscriptions	Monthly	EDRS	\$ 160.00 (Average)	\$ 160.00 (Average)	\$1,920.00 (Average)	\$1,920.00 (Average)	Volume depen- dent, 1979 cost was \$1869.11 plus postage
On Demand Titles	---	EDRS	See Note	See Note	See Note	See Note	Microfiche: 1-5 = \$0.83 6 = \$1.00 7 = \$1.17 \$0.17 for each ad- ditional microfiche (56 pages). Plus Postage.
Back Collections							
1966 and 1967	---	EDRS	\$ 354.08				
1968	---	EDRS	\$1,094.32				
1969	---	EDRS	\$1,271.92				
1970	---	EDRS	\$1,311.04				
1971	---	EDRS	\$1,511.44				
1972	---	EDRS	\$1,564.40				
1973	---	EDRS	\$1,362.48				
1974	---	EDRS	\$1,425.44				
1975	---	EDRS	\$1,598.32				
1976	---	EDRS	\$1,671.92				
1977	---	EDRS	\$1,592.88				
1978	---	EDRS	\$1,655.12				
1979	---	EDRS	\$1,869.11				
1980 (Estimated)	---	EDRS	\$1,930.00				

*Complete addresses for all publishers are listed on page 3.

****Oryx Prices include postage; Macmillan prices do not include postage.**

FIGURE I-6: ERIC PRODUCT SUMMARY (Page 2 of 3)

ERIC Product Summary(Cont'd.)

PRODUCT	FREQUENCY	PUBLISHER/AVAILABILITY*	ISSUE PRICE**		ANNUAL SUBSCRIPTION		NOTES
			DOMESTIC	FOREIGN	DOMESTIC	FOREIGN	
23. READING: AN ERIC BIBLIOGRAPHY, 1970-72	---	Macmillan	\$ 11.50	\$ 11.50	---	---	---
24. REPORT/PROJECT NUMBER INDEX, CUMULATIVE	Semiannually	ORI	\$ 30.00	\$ 36.00	\$ 50.00	\$ 57.00	
25. RESOURCES IN EDUCATION (RIE)							
Monthly Issues	Monthly	GPO	\$ 3.60	\$ 3.60	\$ 42.70	\$ 53.40	Out-of-print if more than six months old.
Semiannual Indexes		GPO	\$ 9.00	\$ 9.00	\$ 18.00	\$ 22.50	Subscriptions available starting with 1976.
Annual Index		GPO	\$ 12.30	\$ 12.30	---	---	
1974							
1973 (out-of-print)							
1972 (out-of-print)							
1971 (out-of-print)							
1970 (out-of-print)							
1969 (out-of-print)							
1968 (out-of-print)							
1966-67 (out-of-print)							
Back Issues of RIE (Resumes)		Oryx Press	\$ 80.00	\$ 85.00	---	---	Reprints by commercial publishers. See "Educational Documents Abstracts".
1979		Macmillan	\$ 75.00	\$ 75.00	---	---	
1978		Macmillan	per annual	per annual	---	---	
1977 (2 volumes)		Macmillan			---	---	
1976 (2 volumes)		Macmillan			---	---	
1975		Macmillan			---	---	
1974		Macmillan			---	---	
1973		Macmillan			---	---	
1972		Macmillan			---	---	
1971		Macmillan			---	---	
1970		Macmillan			---	---	
1969		Macmillan			---	---	
1968		Macmillan			---	---	
Back Indexes of RIE (Subject/Author)		Oryx Press	\$ 47.50	\$ 50.00	---	---	Reprints by commercial publishers. See "Educational Documents Index".
1979		Macmillan	\$ 45.00	\$ 45.00	---	---	
1978		Macmillan	per annual	per annual	---	---	
1977		Macmillan			---	---	
1976		Macmillan			---	---	
1975		Macmillan			---	---	
1974		Macmillan			---	---	
1973		Macmillan			---	---	
1972		Macmillan			---	---	
1970-1971		Macmillan			---	---	
1966-1969 (2 volumes)		Macmillan			---	---	
26. SOCIAL STUDIES AND SOCIAL SCIENCE EDUCATION, AN ERIC BIBLIOGRAPHY (1973)		Macmillan	\$ 11.50	\$ 11.50	---	---	
27. THESAURUS OF ERIC DESCRIPTORS 1980 Edition	Annually	Oryx Press	\$ 13.20	\$ 14.40	---	---	Paperbound.
28. TITLE INDEX 1966-1976 (Full Cumulation) Annual Cumulations with Quarterly Supplements (1977-)	---	ORI	\$ 50.00	\$ 60.00	---	---	Out-of-print.
	Annually/ Quarterly	ORI	\$ 30.00	\$ 35.00	\$ 45.00	\$ 50.00	

PUBLISHERS' ADDRESSES

ERIC DOCUMENT REPRODUCTION SERVICE (EDRS)
P.O. Box 190
Arlington, Virginia 22210
(703) 841-1212

ORYX PRESS
2214 North Central Avenue at Encanto
Phoenix, Arizona 85004
(602) 254-6156

ORI, INC.
ERIC Processing and Reference Facility
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014
(301) 656-9723

ERIC/SMEAC
Ohio State University
1200 Chambers Road, Third Floor
Columbus, Ohio 43212
(614) 422-6717

GOVERNMENT PRINTING OFFICE (GPO)
Superintendent of Documents
Washington, D.C. 20402

MACMILLAN INFORMATION
Front and Brown Streets
Riverside, New Jersey 08075
(609) 461-6500

*Complete addresses for all publishers are listed on page 3.
**Oryx Prices include postage; Macmillan prices do not include postage.

FIGURE I-6: ERIC PRODUCT SUMMARY (Page 3 of 3)



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 2: ACQUISITIONS

November 1980

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION II: ACQUISITIONS

ACQUISITIONS

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ACQUISITIONS

SUMMARY OF SIGNIFICANT RULES

1. Clearinghouses have the basic responsibility for acquiring those documents that deal with their subject areas. Clearinghouse efforts are supplemented by those of Central ERIC (NIE and OE reports) and the ERIC Facility (Federal and Inter-Governmental documents).
2. An acquired document may be selected or rejected, but an unacquired document never receives the benefit of an informed evaluation. Therefore, while some selectivity should be exercised in acquiring documents, if potential exists and resources permit, it is better to acquire than to make a judgment sight unseen.
3. Arrangements that cause documents to be received automatically, whenever they first become available, are generally more productive and more economical than on-demand after-the-fact efforts; in addition, they result in more timely receipt of documents.
4. Exchange arrangements must be monitored to ensure their effectiveness (are the documents bargained for being received?) and their fairness.
5. Each Clearinghouse is responsible for establishing basic control over the documents that it has on-order and in-process.
6. Clearinghouses are responsible for obtaining reproduction releases for all documents they enter into the ERIC system (except uncopied documents produced by or funded by the Federal Government). Releases are often best obtained during the original acquisition process.
7. Department of Education contractor reports must be released by their respective monitors before they can be processed for ERIC. Such reports received from the Facility can be considered released.
8. Whenever possible, documents should be obtained on a complimentary or free basis (citing the many advantages of being in the ERIC system). Documents should be purchased only when they cannot be obtained in any other way and when their value to the system justifies the expense.
9. Documents that are available only from sources outside the United States may be acquired, but they must meet more stringent selection criteria than domestic documents.
10. Any ERIC component may make a recommendation that a given journal be covered by CIJE; however, responsibility for the decision to cover or not rests with the Clearinghouse to which the journal would be assigned for processing.

II. ACQUISITIONS

A. Introduction

Productive use of the ERIC Data Base is dependent upon the quality and comprehensiveness of the input to it. Acquisitions is the critical first step in building the data base. The acquisitions activity provides the raw material for all the functions that follow:

- selection;
- processing (cataloging, indexing, abstracting);
- announcement;
- retrieval;
- dissemination.

In the ERIC system, all components play a role in acquisitions. This section covers the responsibilities of each of these components, the various techniques used for acquiring documents, and the ways that balance and coordination are achieved between distant elements of the system.

B. Acquisitions Responsibilities

Four separate acquisitions efforts go on concurrently within the ERIC system. All work cooperatively to provide comprehensive coverage of the report literature of education (for announcement in RIE) and of the journal literature of education (for announcement in CIJE).

1. Central ERIC

Central ERIC establishes the basic policies governing all acquisitions work. In addition, Central ERIC has responsibility for the acquisition of reports prepared under contract or grant with the National Institute of Education and the U.S. Office of Education (and their counterparts in the Department of Education). Central ERIC controls the overall number of journals covered by CIJE.

2. Clearinghouses

The ERIC Clearinghouses have basic responsibility for establishing document acquisitions programs covering comprehensively their respective subject areas. Each Clearinghouse has a designated "acquisitions" staff member responsible for acquiring documents, and subscribing to journals within the Clearinghouse's scope of interest.

3. ERIC Facility

The ERIC Facility has basic responsibility for the Federal area (outside of NIE and OE); for State Departments of Education; for certain foreign, international, and inter-governmental arrangements; for major education associations; for general education publishers; and for systemwide coordination to avoid duplication of effort.

4. CIJE Contractor

While the Clearinghouses have responsibility for identifying, acquiring, evaluating, and making recommendations concerning coverage for all new education-related journals, the CIJE Contractor controls and coordinates all additions to coverage and, with Central ERIC, determines the overall number of journals to be covered.

C. Acquisitions Methods and Techniques

1. General

Among the various technical processing tasks involved in controlling a literature and building a data base, acquisitions is unusually dependent for its success on resourcefulness, inventiveness, and industry, and less dependent on the exact following of written policies and procedural rules (such as presented here). This is because there is not one single best way to bring documents in. The opportunities present themselves in a multitude of guises. They must be seized rapidly and with whatever accommodations and adjustments the situation calls for. The acquisitions librarian or specialist must be determined, able to solve problems, far-sighted, creative, and whatever else is necessary to ensure a steady inflow of potentially valuable documents.

The acquisitions process always contains an element of selection in that not everything can be obtained, priorities must be set, decisions must be made even as to what to go after. Nevertheless, a cardinal rule of the acquisitions process is, if resources permit, it is better to obtain a document than not. Once obtained, a document may be selected or rejected, but if it is never obtained in the first place, ERIC personnel never get a chance to exercise any selective or critical judgment with respect to it.

2. Acquisitions Tools

A wide variety of reference tools are useful in acquisitions work. Most prominent and numerous are the tools to be scanned in order to learn of promising new reports and documents, e.g.:

- newsletters of professional associations;
- professional journals;
- catalogs and flyers of publishers;
- other abstract journals;
- bibliographies and references included in documents and articles already selected for RIE or CIJE;
- calendars of upcoming conferences and meetings;
- directories that list organizations likely to be sources of relevant documents;
- research-in-progress compilations that pinpoint future producers, etc.

An active acquisitions effort typically builds up an extensive reference collection and also ensures the continued regular receipt of numerous serial publications that are regularly scanned. Examples are given in the Clearinghouse and Facility parts of this section.

3. Form Letters

Because of the large number of contacts required by the acquisitions process, it is often necessary to rely on form letters, or at least standard language which has been developed to make an optimum presentation of the requester's position, the advantage of giving a document to the ERIC system, etc., and which can be incorporated into the body of individual letters. With good printing and a personalized inside address and salutation, a form letter can appear quite "customized" and can be used in place of individual letters. There will, of course, always be instances in which original letters must be written. Nevertheless, form letters definitely have a time-saving role to play in acquisitions work, particularly in the initial contact phase. Most Clearinghouses make use of a variety of form letters to cover different situations. Examples are to be found in the Clearinghouse and Facility parts of this section.

4. Methods for Acquiring Documents

a. Unsolicited Receipts

An active acquisitions program is characterized by continuous personal and correspondence efforts to keep ERIC's document needs before potential contributors. A number of Clearinghouses have developed acquisitions brochures focusing on their specific areas of interest. These brochures were developed for distribution at conferences and for inclusion in mailing packets. Brochures, such as *Submitting Documents to ERIC* and *How to Use ERIC*, and the introductory matter to *Resources in Education*, also contain general information concerning ERIC's desire for educational literature and instructions for contributing documents. These and other efforts result in the receipt of documents which were never specifically solicited. Such receipts occur at all levels of the network, including EDRS, and must be routed to the appropriate Clearinghouse for processing.

Central ERIC and EDRS routinely route such documents to the ERIC Facility for assignment to the appropriate Clearinghouse. The Clearinghouses also transfer documents among themselves, as necessary.

This is one of the easiest ways to get documents, though not the most reliable. As public awareness of ERIC grows, more documents come into the system in this manner. Thank you letters and follow-up letters to contributors of this type sometimes result in continuing submissions or formal arrangements.

b. Automatic Distribution

The most productive kind of acquisitions arrangement for the ERIC system is one where Clearinghouses or the Facility arrange to be placed on an organization's mailing list to get all (or classes) of publications "automatically," as issued. The Clearinghouses and the Facility establish as many automatic acquisitions arrangements as possible. Such arrangements ensure early receipt of an organization's relevant material, usually on initial distribution. Where a request for a specific title nets one document, a successful request to be put on a distribution list may net many times that many documents over time.

All automatic acquisitions arrangements should be documented. All correspondence exchanged, together with the signed Blanket Reproduction Release form (if it is necessary), should be included in the documentation. A list of all such arrangements is cumulated by the Facility in the semiannual *ERIC Acquisitions Arrangements (EAA)* list. All of these arrangements must be regularly monitored to ensure that they are working and to determine which arrangements may have ceased to be productive.

c. Requests for Specific Titles

Specific titles of documents relevant to the field of education come to the attention of acquisitions personnel by a variety of channels:

- requests from users, the public, or other staff members;
- news releases, newsletters, and other rapid announcement sources;
- conference announcements and programs;
- conventional media regularly read or scanned, e.g., reviews, professional and association journals, newspapers/radio/TV;
- library acquisitions tools, e.g., *Publishers Weekly*; other abstract journals, e.g., *Government Reports Announcements*; acquisition lists of certain libraries and information centers, bibliographies in received documents, etc.

The acquisition of specific titles usually involves an individual written request (and reproduction release) directed at the author, sponsor, publisher, or other source. Sometimes a modified form letter (citing the specific title desired) can be used; sometimes a telephone call can be employed. Sometimes a request for a single title will lead to an offer of other related publications or an offer to send future publications as

issued. For the most part, however, requests for specific titles are a one-for-one proposition, i.e., one successful request nets one title. All requests should be, at least initially, for complimentary or review copies, relying on the many advantages ERIC has to offer to persuade sources to contribute their output free of charge.

Records should be kept of each title so requested, in order to avoid duplicate requests (irritating to the source and wasteful of effort), and in order to be able to respond knowledgeably to all inquiries about documents in process. As materials are received and included in the system, this outstanding request or on-order file must gradually be purged to keep its size manageable.

d. Purchase

While most documents can be acquired for ERIC free of charge or via exchange, some few must be purchased. Prime examples of valid documents that must be purchased are those acquired by the Facility from the Government Printing Office and UNESCO. Other material is available from a wide variety of commercial or non-profit publishers (or authors) who have either copyrighted the document in question or otherwise restricted its reproduction in order to be able to sell it to defray publishing expenses.

Purchases should be made when necessary to obtain a valuable and useful title; however, they should always be scrutinized carefully and made deliberately, with full awareness of the ERIC selection criteria (enumerated in Section III). If reproduction releases (for Level 1 or Level 2 input) cannot be obtained, the document must be entered at Level 3. It is not advantageous to the RIE journal, the microfiche collection, or the system in general, to have an excessive number of non-reproducible Level 3 announcements, where the user must be directed outside the ERIC system for access. Level 3 input into RIE has decreased over the last few years to around 5%. This seems to be an acceptable level and Clearinghouses should keep this statistic in mind when evaluating their own volume of Level 3 input. (Please note that GPO documents should enter the system at Level 1 (see Section II.8.d).)

Two purchasing arrangements which can be used for ordering are:

(1) Specific Orders

The same guidelines and observations that apply to the section above on "Requests for Specific Titles" apply equally here. The only difference is that the necessity of paying requires completion of a formal "Purchase Order," or its equivalent, the establishment of an account, or requesting and paying invoices.

(2) Standing Orders

Standing orders are, in effect, subscriptions for all the publications (or relevant classes of publications) produced by a given source. Standing orders are only possible in those instances where the source (or jobber) offers the service. Standing orders often have the advantage of reducing the time to acquire, cutting paperwork, lowering overall costs, and most importantly, assuring comprehensive acquisitions. An example of a standing order would be the ERIC Facility's arrangement with UNIPUB (the U.S. agency for UNESCO publications).

e. General Solicitation

The solicitation notices contained in RIE and the various Clearinghouse brochures are essentially undirected. They are not addressed to particular institutions, nor do they request particular documents. There are many opportunities during the year, however, to direct similar general solicitations to specific organizations and activities. In such situations, the solicitation is not typically for specific documents, but rather for everything that the activity produces. The purpose is not to try to set up a permanent distribution list arrangement, but rather to try to take advantage of a temporary and often transient opportunity.

Professional meetings, conferences, symposiums, seminars, workshops, colloquia, etc., are good examples of such opportunities. ERIC acquisitions staff who learn of relevant activities of this type (particularly those geographically close by) may participate at various levels, e.g.:

- write for proceedings and papers;
- attend the activity;
- participate in the program;
- establish a booth, etc.

Whatever level of participation is chosen, the acquisitions person involved should take every opportunity to publicize ERIC and make its document needs known, e.g.:

- distribute name cards;
- hand out brochures and materials describing the ERIC system and the need for contributor input;
- request preprints or copies of papers from individual speakers, session leaders, or the conference director.

Persons representing ERIC at such activities are strongly urged to remember to solicit for the system in general and not just for their own element of the system. Sometimes the solicitation for conference papers can be a cooperative undertaking between the host association and a Clearinghouse on behalf of the ERIC system. For example, the annual American Educational Research Association (AERA) meeting papers are collected by the ERIC Clearinghouse on Tests, Measurement, and Evaluation (TM) for assignment to the network.

f. Exchanges

Exchanges are a variation of automatic distribution. Most of ERIC's solicitations are for free copies of publications (with ERIC offering in return the advantages of announcement, indexing, inclusion in the machine-readable data base, reduction to microfiche, and constant availability). Sometimes, however, *quid pro quo* exchanges may be the best way to acquire publications from certain organizations, e.g., foreign ministries of education. The Clearinghouses may offer their own newsletters, bibliographies, and other publications. Exchanges should be regularly and carefully monitored to ensure that ERIC is receiving the desired publications and that what is being received is a fair exchange for the ERIC material being sent.

D. Central ERIC Role in Acquisitions

1. Policy Setting, Guidance, Coordination, Monitoring

As with all phases of the ERIC program, Central ERIC sets the basic acquisitions policies to be followed. Central ERIC determines what kinds of documents are suitable for RIE and has formalized these decisions in the selection criteria stated in Section 3, "Selection." Central ERIC approves the scope of interest of each Clearinghouse, (See Appendix A) thereby establishing those areas of the field of education for which each has responsibility. The format and frequency of the basic duplicate checking tools, e.g., *Title Index*, *Acquisitions Data Report*, *ERIC Acquisitions Arrangements*, used in acquisitions are dictated by Central ERIC. The statistical and narrative reports required of each element of the network are detailed by Central ERIC (see the *Administrative Procedures Manual*). Central ERIC monitors all network activities, including acquisitions, as to the adequacy of performance and compliance with contract conditions.

Each network component has a designated monitor at Central ERIC with whom to discuss problems. In addition, Central ERIC designates one staff member as overall Acquisitions Coordinator. Both are available to acquisitions staff to answer questions concerning document acquisitions, reproducibility, selection, copyright, PRIORITY documents, and scope overlap.

Contact between Central ERIC and the ERIC Facility is particularly frequent insofar as Department of Education documents flow on a daily basis from the former to the latter. Central ERIC coordinates acquisition by the Facility of the documents of State Departments of Education and foreign ministries of education. There are frequent requests for information concerning the receipt or status of particular documents. In addition to actual documents, many notices of publications, conferences, and sources of educational materials come to the attention of Central ERIC staff and are passed on to the Facility.

2. Acquisitions Responsibilities

Central ERIC has reserved to itself the acquisition of certain classes of documents. It acquires the formal publications and contractor reports of the Department of Education. It negotiates arrangements for receipt of publications from some foreign institutions and several international organizations (sometimes offering complimentary distribution of RIE in exchange). Central ERIC coordinates the acquisitions of State documents through the Facility. All reports and documents acquired by Central ERIC, whether actively or on an unsolicited basis, are forwarded to the ERIC Facility for assignment to the appropriate Clearinghouses. One of the important procedural objectives in handling acquisitions centrally (by either Central ERIC or the ERIC Facility) is to avoid multiple solicitations from various ERIC network components, all converging on (and confusing) Government agencies or foreign organizations.

3. PRIORITY Documents

Central ERIC occasionally designates certain important documents, particularly OE and NIE reports, as "PRIORITY Documents." A special identifying notice is affixed to these documents (see Figure II-1). Questions or problems concerning reproducibility or copyright are resolved before sending them to the Facility for Clearinghouse assignment, so that PRIORITY documents can proceed as rapidly as possible through the system.

There are only two classes of document handling: "ROUTINE" and "PRIORITY." "PRIORITY" status indicates to the Clearinghouse that processing must take place as quickly as necessary to ensure that the document appear in the earliest possible issue of RIE. (This can be determined from the Master Schedule.) If the deadline of an issue is close, this can sometimes require virtually 24-hour turnaround. The handling of PRIORITY documents is described in detail in Section IV.

If, for any reason, a PRIORITY document is not selected for announcement in RIE, this decision should be communicated by the Clearinghouse to its monitor as quickly as possible.

DO NOT REMOVE FROM DOCUMENT

CLEARINGHOUSE NO. _____

PRIORITY

Please EXPEDITE the processing of the attached report and,
if selected, return it to the ERIC Facility for announcement
in the _____issue of RIE.

EFF-39

**FIGURE II-1: NOTICE IDENTIFYING A DOCUMENT TO BE ACCORDED
PRIORITY HANDLING**

E. Clearinghouse Acquisitions Efforts

1. General Mandate

The primary responsibility in ERIC for acquisitions and the bringing in of documents to the system has always been and continues to be with the ERIC Clearinghouses. Each Clearinghouse is responsible for ensuring a steady flow into RIE of high-quality documents in its special area of education.

In order to qualify for RIE, documents must:

- fall within the field of education, broadly defined;
- meet the criteria set forth in Section 3, "Selection," with regard to its physical characteristics (i.e., size and legibility), content, and quality.

Documents which fail to satisfy the basic requirements are not to be input to RIE, but may be kept for local collections (unfunded by ERIC), if desired. *If a document falls outside the scope of interest of the Clearinghouse considering it, it should be transferred to the appropriate Clearinghouse for evaluation, rather than discarded.*

2. Kinds of Documents to Be Acquired

The following are examples of the types of materials which should be acquired as candidates for RIE:

- Bibliographies, Annotated Bibliographies;
- Conference Papers;
- Evaluation Studies;
- Feasibility Studies;
- Instructional Materials/Curriculum Materials;
- Legislation and Regulation;
- Manuals, Guides, and Handbooks;
- Monographs, Treatises;
- Opinion Papers, Position Papers;
- Proceedings;
- Program/Project Descriptions;
- Research Reports/Technical Reports;
- Resource Guides;
- Speeches and Presentations;
- State of the Art Studies;
- Statistical Compilations;
- Taxonomies and Classifications;
- Teaching Guides;
- Tests, Questionnaires, Measurement Devices;
- Vocabularies, Dictionaries, Glossaries, Thesauri.

The following types of journals should be acquired for coverage by CIJE:

- Education journals (high quality and totally devoted to education) for *comprehensive cover-to-cover indexing* of all articles;
- Education-related journals (high quality, but not totally devoted to education), for *selective coverage* of only those articles relevant to education;
- Journal articles (relevant to education, but contained in journals that do not ordinarily cover educational topics), and that are not regularly covered by CIJE, for ad hoc selection and indexing as identified. Sometimes called "oneshot" articles. (See Section II.G.)

ERIC would like to be given the opportunity to examine virtually any document dealing with any aspect of education. The ERIC audience is so broad (encompassing teachers, administrators, librarians, researchers, media specialists, students, counselors, and every other variety of educator) that it must collect a wide variety of documentation in order to satisfy its users.

3. Sources of Documents

The Clearinghouses are responsible for acquiring documents issued by all organizations, except those reserved to Central ERIC (see Section II.D) and to the ERIC Facility (see Section II.F).

Some documents arrive unsolicited, and others are received from the ERIC Facility. For most acquisitions, however, the Clearinghouses must rely on such contacts as:

- appropriate professional societies and academic institutions;
- people known to be working in the field, specific State or local officers responsible for programs relevant to the Clearinghouse subject area;
- foundations or other organizations sponsoring education projects, publishers, institutes, speech-makers, information centers;
- a wide variety of other individuals and organizations concerned with education.

The following acquisitions strategies for different classes of contributors have been reported by various Clearinghouses:

a. Previous Document Contributors

- Send letters to "automatic contributors," thanking them for past cooperation and asking them to continue to contribute documents.
- Contact authors of Clearinghouse Information Analysis Products, reminding them that the Clearinghouse is interested in reviewing appropriate documents that may come to their attention.
- Send complimentary microfiche to contributing institutions/authors.

b. Conferences

Conferences can be a lucrative source of documents, and Clearinghouses should be alert to all conferences in their subject area. In addition, Clearinghouses may coordinate with other elements of the network in covering all papers and products of a large or general conference in their geographic area, later forwarding those outside their own particular subject scope to the Facility for assignment elsewhere in the network. An exemplary arrangement for the collection of conference papers are those established by TM to obtain AERA papers and CG to obtain APA papers. For typical form letters used by Clearinghouses see Figures II-2 and II-3.

Clearinghouses should be aware of the following methods of obtaining documents from conferences:

- If an organization collects the speeches at its conferences, request that a set be collected for the Clearinghouse, or
- Suggest that the program committee chairperson endorse a solicitation letter or distribute acquisitions letters and brochures on behalf of the Clearinghouse, or
- Ask for a program, mailing list, directory of participants' and then solicit papers directly from participants.

The *ERIC Conference Calendar*, prepared annually, lists all conferences in which Clearinghouses will participate that year, including those from which papers will be solicited. It is an essential tool for the coordination of conference-related acquisitions efforts.



ERIC CLEARINGHOUSE ON TESTS, MEASUREMENT, & EVALUATION
EDUCATIONAL TESTING SERVICE, PRINCETON, NEW JERSEY 08541
TELEPHONE: 609-921-9000

February 8, 1980

Dear Colleague:

We would like to obtain two copies of your presentation(s) at the 1980 Annual Meeting of the American Educational Research Association (AERA). Since 1971, ERIC/TM and the central office of AERA have cooperated in an attempt to collect all papers. Each one we receive will be considered for announcement in our abstract journal, Resources in Education, and subsequent availability through the ERIC Document Reproduction Service. The enclosed brochure contains a brief description of ERIC and lists the advantages of contributing documents.

Please observe the following guidelines when submitting your paper:

1. Complete and return the enclosed reproduction release with two copies of your paper.
2. Provide clearly typed/printed copies (to permit microfilming, a sharp contrast between typeface and background is essential).
3. Include a 100-200 word summary.
4. Use the enclosed postage paid mailing label.

If your paper is not available before the meeting, please bring it to the ERIC exhibit booth, No. 56, at the Civic Center or mail it to the Clearinghouse at a later date.

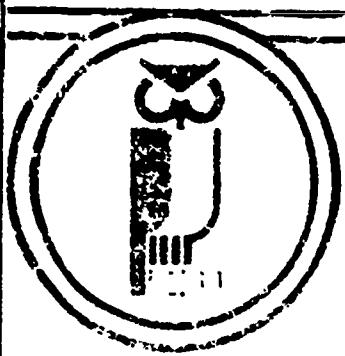
We look forward to hearing from you and hope you will be able to visit us in Boston.

Sincerely,

Carol Paskowsky
Acquisitions Coordinator

CP/bg
Enc.

FIGURE II-2: TYPICAL FORM LETTER USED BY CLEARINGHOUSES FOR OBTAINING DOCUMENTS FROM CONFERENCES (EXAMPLE 1)



Counseling and Personnel Services Clearinghouse

2108 School of Education The University of Michigan
Ann Arbor Michigan 48109 313/764 9492

ERIC, the Educational Resources Information Center, is a United States Government funded project designed to acquire, store and disseminate educational information. The Counseling and Personnel Services Clearinghouse, CAPS, is one of sixteen clearinghouses covering various aspects of education which comprise the ERIC system. For your further information, we are enclosing a brochure that describes the system and the CAPS clearinghouse in greater detail.

We are writing to you as the contact person for the following Conference/Workshop.

CAPS would like to receive proceedings, programs, or any other publications resulting from this Conference and/or Workshop in order to request individual papers from the presenters. These papers will be reviewed for possible citation in the monthly index from the Government Printing Office, Resources in Education, RIE. The text of each paper then becomes available from the ERIC Document Reproduction Service, either in microfiche or hardcopy form. The ERIC system provides the educational community with access to current literature which might otherwise be unavailable or difficult to locate.

If, however, you intend to make the proceedings of your Conference/Workshop available in monograph or other form, CAPS also would be pleased to receive two copies of this for review and possible citation in RIE.

Sincerely,

Helen Mamarchev

Helen Mamarchev
Acquisitions Coordinator

HM/jl
enclosure

ERIC®

Harry R. Walz Director • Libby Benjamin Associate Director • Carol K. Joslow Assistant Director

FIGURE II-3: TYPICAL FORM LETTER USED BY CLEARINGHOUSES FOR OBTAINING DOCUMENTS FROM CONFERENCES (EXAMPLE 2)

c. Professional Associations

- Obtain mailing lists from professional and/or academic organizations for direct mail campaigns to these individuals.
- Send special letters to sub-groups of professional organizations, i.e., racial and ethnic sections, women's caucus groups, etc.
- Attend meetings, participate in programs, etc.

d. Academic Institutions

- Use college catalogs or other reference books to identify graduate departments within the Clearinghouse's scope area. After contact, endeavor to establish an automatic arrangement and blanket permission so that all documents issued by the department are submitted to the Clearinghouse.
- Hold ERIC workshops in university libraries or education departments.

e. Foundations (Sponsoring Education Programs)

- Ask foundations to include a request that grantees submit resulting papers and final reports to ERIC.
- Supply foundations with ERIC brochures and other literature to distribute to the grantees.

f. Non-Profit Organizations Concerned with Education

- Send a printout of all documents contributed to RIE and CIJE by the organization in question. Request that all documents still available, but not on the printout, be submitted to ERIC. For a typical form letter see Figure II-4.
- If the Clearinghouse has a complimentary mailing list, add the organization to the distribution list for ERIC products and IAP's.

g. Journal Articles

Contact editors of appropriate journals for quality articles they have not been able to publish. Because of space limitations, journals can publish only a small number of papers they receive. A number of papers may be rejected but may meet the ERIC selection criteria. Journal editors can be contacted and asked to include information about ERIC when they send a letter of rejection to an author. The editors can include a sheet which states that ERIC would be interested in

ERIC

EDUCATIONAL RESOURCES INFORMATION CENTER



Clearinghouse on Higher Education

THE GEORGE WASHINGTON UNIVERSITY

Enclosed is a list of your organization's publications submitted to the Educational Resources Information Center (ERIC) system since 1975. ERIC's purpose is to create wider awareness and availability of education-related literature. This is accomplished through announcements in the monthly bibliographic journal, Resources in Education, received by more than 5,300 libraries, the ERIC microfiche collections available in over 600 libraries, ERIC Document Reproduction Service (EDRS) dissemination, and computerized retrieval of information from the ERIC data base. ERIC's role can be even more significant with your continued participation.

The list is in chronological order, with your most recent publications cited first. The ERIC Document (ED) number assigned to each publication is included. All those without the double slash mark (//) are in the ERIC microfiche collection and are available to ERIC users.

Your clients will find it useful to know that your publications are available through ERIC. When you refer to your literature, it is beneficial to cite the document's ED number. A sample of the bibliographic format preferred is attached for your reference.

Microfiche or paper copies of your complete documents can be ordered through EDRS. This dissemination service is particularly useful for your limited-distribution or out-of-print publications. Ordering information from EDRS is included with this letter.

If you find that you have recent publications not yet submitted to ERIC, please send two copies of each report and, if possible, a 200-word abstract of each document. Mail them to the ERIC Clearinghouse on Higher Education with a copy of the attached copyright release form. Release permission is required, even if your publication is not copyrighted at this time, due to the new copyright law. The copyright release form may be copied for individual documents, or you may send in the "blanket release" form to indicate release for all papers submitted now or in the future.

Thank you for your contributions in the past. We look forward to continuing to receive your publications and being able to give them added visibility. I would also like to invite you to contact us whenever we may be of service.

Sincerely,

Jonathan D. Fife, Director

Enclosure

SUITE 640 / 17TH & DUPONT CIRCLE / WASHINGTON, D.C. 20036 / (202) 296-2597

FIGURE II-4: TYPICAL FORM LETTER USED BY CLEARINGHOUSES TO SOLICIT DOCUMENTS FROM NON-PROFIT ORGANIZATIONS CONCERNED WITH EDUCATION

reviewing the paper for possible inclusion in ERIC. (It should be made clear that announcement in a secondary abstract journal like RIE is not the equivalent of publication in a primary journal, but may nevertheless serve to preserve useful material.)

4. Tools for Use in Identifying Documents to Be Acquired

Clearinghouses utilize a number of reference tools, publications, and other sources to identify specific titles and potential contributors of documents. Such tools include:

- Conference and convention programs (e.g., APA Program);
- Journals newsletters, newspapers, advertisements, book reviews, and news items should be scanned regularly for relevant new titles and names of people or institutions engaged in projects, studies, or grant awards which could produce appropriate documents (e.g., *Education Daily*, *Chronicle of Higher Education*, and *Library Journal*).
- Bibliographies, publication lists, catalogs, acquisition lists, etc., can be excellent sources of new titles, and sometimes also provide ordering information (e.g., *GPO Monthly Catalog*, *UNESCO Publications*, *Checklist of Congressional Hearings*).
- Document reference lists, footnotes, etc. Documents already acquired can often, through their content, lead to other titles or other sources. References contained in Clearinghouse Information Analysis Products can often furnish valuable leads to new documents.
- Staff and client recommendations. Reference inquiries involving documents found not to be in the system should routinely be copied to the acquisitions unit.

Each subject area, and hence each Clearinghouse, has its own major reference tools. Clearinghouse personnel should take care to familiarize themselves with the specific reference tools that best fit their area of coverage and should see that they are represented in their reference collection.

5. Clearinghouse Acquisitions Operations (Typical)

Clearinghouse acquisitions operations differ from one another in procedural detail, forms and files used, recordkeeping, and in other respects. No matter how they are implemented, however, every Clearinghouse acquisitions operation is expected to observe the basic functional steps described below:

- a. Using the relevant sources and tools, identify titles which appear to be desirable acquisitions within ERIC's scope. The acquisition of complimentary copies is always an objective, although items which cannot be obtained free of charge may be purchased, or the Clearinghouse may offer to exchange its newsletters, bibliographies, etc., for documents.
- b. Once a title has been identified and has been determined to be within the Clearinghouse's scope of interest, check the ERIC Acquisitions Arrangements (EAA) list to determine whether or not the source organization is covered by an acquisitions arrangement with another Clearinghouse or the Facility. If an arrangement already exists between the source organization and another ERIC component, the component having the arrangement should be contacted and coordinated with before any solicitation of documents is done.
- c. Check local "on-order" files and standard ERIC duplicate checking tools (such as the Acquisitions Data Report and the Title Index) to determine if the identified items have already been ordered, received, or processed.
- d. If the document of interest is from a Government agency, a State Education Agency (SEA), an NIE Laboratory or Center, or an organization with which the Facility has an acquisitions arrangement, (see EAA list), requests for the document should be made to the Facility. Titles should be requested by using the standard form provided for this purpose by the Facility, the "Clearinghouse Acquisitions Request" (EFF-76). A typical request is shown as Figure II-5. This form should be filled out as completely as possible and, where possible, a copy of the full citation or document description engendering the request should be attached. The Facility will either obtain the document or let the Clearinghouse know if it is unavailable.
- e. After following the above steps, request the documents, using a form letter, telephone call, or purchase order (whichever is more efficient). An example of a standard form letter is shown in Figure II-6. With each solicitation (unless ERIC has blanket reproduction permission), include a Reproduction Release form and all the bibliographic data available. Some Clearinghouses have found the enclosure of a self-addressed label with requests, and self-addressed envelope with other correspondence, to be very useful in expediting responses.
- f. Prepare an "on-order" record for Clearinghouse files; include title, author, source, price, and data ordered. Some Clearinghouses have found the simplest record to be a carbon copy of the solicitation.
- g. As documents are received in the Clearinghouse, determine whether they are on-order or have arrived unsolicited. Those on-order should have receipt information entered on the on-order record, or the record should be purged, whichever in-house procedure dictates. Receipt of documents arriving unsolicited should be recorded and all useful correspondence and addresses should be preserved. (The use of the self-addressed label helps identify solicited items.)

(Clearinghouse)

(Date requested)

(Requested by)

CLEARINGHOUSE ACQUISITIONS REQUEST

(TO THE ERIC FACILITY)

A. Document Requested

1. Title: _____
2. Publication Date: _____
3. Author: _____
4. Order Number: _____
5. a. Institution: _____
- b. Division/Branch: _____
6. EFAA# (if any): _____
7. Supporting documentation providing additional bibliographic details (e.g. xerox of complete citation) is attached:

yes no

B. Duplicate Check History (To avoid double work)

1. Title Index

Current Year
1985
1984
1977-1983

List Months Checked _____

2. Acquisitions Data Report (ADR)

List Months Checked _____ to _____

C. Notes/Comments from Clearinghouse

D. Notes/Comments from Facility

FIGURE II-5: CLEARINGHOUSE ACQUISITIONS REQUEST FORM

EFF-76
rev. 12/85

University of Illinois at Urbana-Champaign

College of Education

Institute for Child Behavior and Development

**EDUCATIONAL RESOURCES INFORMATION CENTER/
EARLY CHILDHOOD EDUCATION**

805 West Pennsylvania Avenue
Urbana, Illinois 61801
(217) 333-1386

Your report

is of interest to others in childhood development and early education. The ERIC Clearinghouse on Early Childhood Education would like to consider your paper for possible inclusion in the federally-funded ERIC information system. If you are interested, please send us two clearly typed or Xeroxed copies; an abstract would also be helpful. It is also necessary to complete and return the enclosed reproduction release along with the documents.

For details on submitting papers to ERIC, and for information on the ERIC system, please refer to the accompanying brochures. We also invite you to send other appropriate documents.

We hope to hear from you soon.

Sincerely,

Dianne Rothenberg
ERIC/ECE Acquisitions

DR/JM
Enclosures

FIGURE II-6: TYPICAL FORM LETTER USED BY CLEARINGHOUSES TO SOLICIT DOCUMENTS

- h. Upon receipt of a document, acknowledgement of receipt of acceptance/rejection by card or letter is optional. Notifications to contributors vary considerably from Clearinghouse to Clearinghouse (see Figure II-7).
- i. Check to see if a Reproduction Release form, or letter giving reproduction permission, accompanies the document. Resolve any copyright or reproduction release questions. (See Section II.8.) Retain all pertinent correspondence.

If the document does not have a Reproduction Release form, and one is required, Clearinghouses have the following options:

- Check the EAA List to see if ERIC has been given a Blanket Release;
 - Write for release (see Figure II-8). (It is advisable to write for releases only after a document has been selected for RIE. Writing prior to selection may result in needless work if the document is later rejected and may prematurely imply acceptance.);
 - Hold until after acceptance, then write for release.
- j. Evaluate material using prescribed selection and legibility criteria (see Section III) and Clearinghouse Scope of Interest statement. Documents inappropriate for the system may be discarded after a suitable retention period that permits the Clearinghouse to respond to author and source inquiries or requests for return. Documents falling within the scope of other Clearinghouses should be transferred to them. (See Figure II-9 for ERIC Document Transfer Form.) Some Clearinghouses notify contributors when they transfer a document. (See Figure II-10.)
 - k. Prepare an entry for the *Acquisitions Data Report* (a composite report, prepared monthly by the Facility, reflecting the acquisitions of all Clearinghouses during the previous six month period). This step requires the Clearinghouse to formally accession the document and to assign a Clearinghouse Accession Number. (Instructions on how to prepare entries for this report are provided in Section IV.)
 - l. Record name and address of contributor (individual or organization) on mailing label, envelope, or form letter, for later use in distributing complimentary microfiche (provided by the Facility). (See Figure II-11.)

NOTE: Complimentary microfiche should *not* be sent to the following kinds of organizations: Congress, Department of Education, Government Printing Office (GPO), large organizations when the specific name of an individual or department is unknown.

We are pleased to inform you that your document entitled:

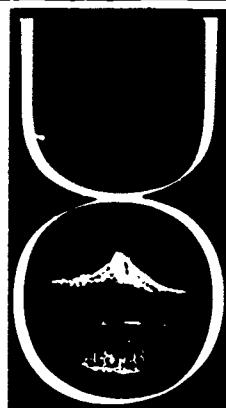
has been selected to be cited in the _____ issue of
Resources in Education and has been assigned the document
number: _____.

We actively solicit documents pertaining to higher education
and we hope that you will encourage your colleagues to send us
their papers and reports on any facet of higher education.

Sincerely,

ERIC Clearinghouse on Higher Education
The George Washington University

FIGURE II-7: TYPICAL EXAMPLE OF FORM USED BY CLEARINGHOUSES TO
NOTIFY CONTRIBUTORS OF ACCEPTANCE OR REJECTION OF DOCUMENT



ERIC Clearinghouse on
Educational Management
UNIVERSITY OF OREGON
Eugene, Oregon 97403

503 686-5043

The ERIC Clearinghouse on Educational Management has received copies of the document(s) listed on the enclosed form. It has been evaluated and we wish to include it in the ERIC index and abstract publication, *Resources in Education (RIE)*. However, the copyright revision law of January 1, 1978, requires a written release for every document reproduced and disseminated by ERIC. Please sign the enclosed release and return it to me at your earliest convenience.

Thank you for your cooperation and time in replying to this request. We will notify you when the resume appears in *RIE*. Please don't hesitate to send us any further research or research-related materials on educational management to consider for *RIE*.

Sincerely,

Clarice H. Watson

(Mrs.) Clarice H. Watson
Acquisitions Librarian

CHW:gh
Enclosures

P.S. If this box is checked, please send us a second copy; it is needed for our files. Thank you.

an equal opportunity affirmative action employer

FIGURE II-8: TYPICAL FORM LETTER USED BY CLEARINGHOUSES TO REQUEST COPYRIGHT RELEASE



DOCUMENT TRANSFER FORM

Date Received: _____ Date Transferred: _____

TO: ERIC/ _____

FROM: ERIC/ _____

The enclosed document(s) appear to be more within your scope than ours.

The document(s) were obtained by (check one):

- solicited contribution
 - unsolicited contribution
 - staff contribution
 - ERIC Facility

Correspondence information is as follows:
(check one):

- all relevant material is attached
 no relevant correspondence; however the name and address of the contributor or contact person is (if known):

Clearinghouse Contact Person

(EFF-70)

FIGURE II-9: ERIC DOCUMENT TRANSFER FORM

TRANSFER CARD TO AUTHOR

We would like to inform you that your document entitled:

*has been TRANSFERRED TO (CLEARINGHOUSE NAME
AND ADDRESS)*

*Thank you for your contribution to the ERIC system.
We hope that you will continue to send us your papers.*

Sincerely,

*ERIC Clearinghouse on
Teacher Education*

FIGURE II-10: TYPICAL FORM USED BY CLEARINGHOUSES TO NOTIFY CONTRIBUTORS THAT THEIR DOCUMENT WAS TRANSFERRED TO ANOTHER CLEARINGHOUSE

University of Illinois at Urbana-Champaign

College of Education
Institute for Child Behavior and Development
**EDUCATIONAL RESOURCES INFORMATION CENTER/
EARLY CHILDHOOD EDUCATION**

805 West Pennsylvania Avenue
Urbana, Illinois 61801
(217) 333-1386

Re:

We are pleased to inform you that an abstract of the document(s) cited above is included in the _____ issue of Resources in Education (RIE), ERIC's monthly abstract journal. The document number assigned to it is ED _____.

Enclosed is a copy of the document resume and a microfiche copy of the document which you may keep for your files.

Thank you for making this work available to us.

Sincerely,

Dianne Rothenberg
ERIC/ECE Acquisitions

DR/jms

FIGURE II-11: TYPICAL FORM LETTER USED BY CLEARINGHOUSES TO SEND CONTRIBUTOR A COPY OF RESUME AND MICROFICHE COPY OF ACCEPTED DOCUMENT

All automatic acquisition arrangements should establish whether and to whom complimentary microfiche should be distributed. When more than one Clearinghouse processes documents from a given organization, it is desirable that complimentary microfiche be distributed in a uniform manner in order to eliminate confusion in the mind of the contributor.

- m. Sending rejection notices is optional, unless specifically requested by the contributor. Clearinghouses vary in the methods used to notify contributors of rejected documents. Some use the standard ERIC "Reply Card." Some use their own forms, providing for a variety of messages. An example is shown in Figure II-12.

After all the above steps are completed and the document is determined to be suitable for RIE, legible, not a duplicate, cleared by the Government Project Officer (where appropriate), without any unresolved reproduction release problems, and mailing information for complimentary microfiche has been prepared, acquisitions formally comes to an end and the document is ready for the cataloging/indexing/abstracting process. Because of the expense of the various intellectual document analysis functions, the acquisitions function must make every effort to eliminate duplicates before that stage of processing is reached. (See Section IV for discussion of duplicate checking process.)

6. Department of Education Documents

a. NIE

All reports sponsored by NIE must be approved/accepted/cleared by NIE before being processed. Normally, Clearinghouses receive such reports from the Facility and it can be assumed that such reports have been approved and may be processed. Any NIE contract/grant reports received from other sources must be cleared through the Facility before they can be processed. This clearance is best obtained by sending a copy of the title page or bibliographic citation to the Acquisitions Librarian at the Facility. The Facility then does the following:

- Records the fact that the Clearinghouse has reported receiving the NIE report and checks to determine if the report has already been acquired;
- Informs the Clearinghouse if the report is a duplicate;
- If the report is new to ERIC, asks Central ERIC to check whether the report has been approved by the Project Officer;
- Informs the Clearinghouse, usually within two weeks, whether to proceed with processing or not. However,



ERIC CLEARINGHOUSE ON TESTS, MEASUREMENT, & EVALUATION
EDUCATIONAL TESTING SERVICE, PRINCETON, NEW JERSEY 08541

Thank you for submitting your document for possible inclusion in the ERIC system. While we recognize the thought, time, and energy that have been devoted to the preparation of this document, we are unable to announce it in Resources in Education and make it available through the ERIC Document Reproduction Service.

The ERIC/TM Clearinghouse receives hundreds of documents each year. Given budgetary limitations and other constraints, we are only able to process a third of the items we receive.

We do hope that you will continue to submit documents for possible inclusion in the ERIC system. Meanwhile, if you have any questions about your document or about ERIC, we will be happy to answer them.

Sincerely yours,

Carol Paskowsky
Acquisitions Coordinator

CP:sf

TELEPHONE: 609-921-9000

FIGURE II-12: TYPICAL FORM LETTER USED BY CLEARINGHOUSES TO NOTIFY CONTRIBUTORS OF NON-ACCEPTANCE OF DOCUMENT

if no negative feedback is received from Central ERIC or the Facility within two weeks, the documents may be processed routinely.

b. Other Department of Education Divisions

All reports sponsored by other Department of Education Divisions must also be approved/accepted/cleared before being processed. Reports received directly from the Facility can be assumed to be approved. In the case of reports received through other channels, copies of the title pages should be sent to the Facility. The checking procedure is the same as that for NIE reports. If, after two weeks, Central ERIC or the Facility has not notified the Clearinghouse to the contrary, Clearinghouses can assume there is no objection to processing the report and can proceed accordingly.

7. Documents Received From the Facility

a. Standard Reply Cards

Reply cards (see Figure II-13) attached to documents received from the Facility require an ED accession number and should, therefore, be detached and returned to the contributor *only when they are not selected*. If selected for RIE, the card remains on the document and is shipped back to the Facility for processing and affixing of the ED number.

b. Special Reply Cards

Special Reply Cards (NDN, SEA) (see Figures II-14(A) and (B)) attached to documents received from the Facility should be detached and returned to contributors as soon as a disposition of the document has been made.

c. PRIORITY Documents

Documents received from the Facility which indicate PRIORITY handling should be evaluated immediately upon receipt. Acceptance requires expedited processing to ensure announcement of the document in the next issue of RIE to be released. Should a PRIORITY document be rejected, Central ERIC must be notified immediately.

d. NIE Document Selection Report

All NIE documents received from the Facility and not selected for RIE must be returned to the Facility and the reason given for their rejection. The NIE Document Selection Report form (see Figure II-15) should be used for this purpose. NIE reports which are not accepted for inclusion in the ERIC system will be retained in the permanent NIE Library collection.

ERIC REPLY CARD

DOCUMENT TITLE: _____

DISPOSITION OF DOCUMENT:

- Selected for the _____ issue of RIE and
 is assigned document no. _____
 Not selected for RIE.
- _____
- _____

CLEARINGHOUSE NAME: _____

Date: _____

HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD?
EFF-28 (7-79)

FIGURE II-13: ERIC REPLY CARD

Submitting State Education Agency

REPLY CARD

Document Title: _____

Clearinghouse Temporary Accession #: _____

SEA Check One: Reproduction Release Enclosed
 ERIC has Blanket Reproduction Release on File

Check One: If not selected: Return Do Not Return
(Please do not ask for return unless absolutely necessary.)

ERIC Disposition of Document

Selected for RIE. Resume will appear in RIE in about 4 months.
 Copies cannot be ordered from EDRS before announcement in RIE.

Not selected for RIE.

COMMENTS: _____

Clearinghouse Name: _____ Date: _____

HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD?

EFF-64 (5/79)

FIGURE II-14(A): ERIC REPLY CARD USED FOR NOTIFYING STATE EDUCATION AGENCIES OF DOCUMENT DISPOSITION

ERIC REPLY CARD

NDN Document Submission

Project Name: _____

Document Title: _____

Please check one: Reproduction Release enclosed
 ERIC has Blanket Reproduction Release on file

Date submitted to ERIC: _____

ERIC Disposition of Document

Selected for RIE.
 Resume will appear in RIE in about 3 months. Copies cannot be ordered from EDRS before announcement in RIE.

Not selected for RIE.

Clearinghouse Name: _____

Date reported to submit or: _____

HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD?

THANK YOU FOR SUBMITTING YOUR DOCUMENT TO ERIC

EFF-59 (10/78)

FIGURE II-14(B): ERIC REPLY CARD USED FOR NOTIFYING NATIONAL DISSEMINATION NETWORKS OF DOCUMENT DISPOSITION

NIE DOCUMENT

SELECTION REPORT

FROM : _____ / _____
(Clearinghouse) (Individual)

TO : ERIC Facility Acquisitions Department

SUBJECT : Return of NIE Document or NIE-Sponsored Report Not Meeting
Clearinghouse Selection Criteria

REFERENCE: _____
(Title of Document)

- Document will not microfilm or reproduce adequately
- Document has been/will be published as a journal article
- Quality of content is not acceptable
- Other _____
- Comments: _____

Enclosure

EFF-71 (4/80)

FIGURE II-15: NIE DOCUMENT SELECTION REPORT

e. Scope Overlap Notices

In order to prevent duplicate processing, a Clearinghouse which receives a Xerox copy of a cover or title page with a "Scope Overlap Sticker" from the Facility should check its records to see if the document is on order, in-process, or otherwise being considered for acquisitioning.

8. Copyright and Reproduction Release

The Copyright Revision Law (PL-94-553), effective January 1, 1978, requires ERIC to assume that all private sector documents, whether carrying a copyright notice or not, are copyrighted, unless such documents were published without a copyright notice prior to January 1, 1978. For this reason, unless ERIC already has blanket reproduction permission from the source organization, a signed reproduction release form must be obtained for every title selected for the ERIC system. The existence of a letter of transmittal giving ERIC permission to reproduce the report is not sufficient.

ERIC has designed two standard reproduction release forms for systemwide use—one for individual documents (see Figure II-16) and one for blanket permissions (see Figure II-17). Clearinghouses are encouraged to develop their own form letters (for examples see Figure II-18) to send to contributors along with the release forms, explaining and introducing the form and making it clear that it should be returned to the Clearinghouse with the document. The Blanket Reproduction Release should be negotiated whenever possible in order to eliminate as many individual release forms as possible, thereby saving both effort and time. Clearinghouses obtaining blanket releases should report them for listing in the annual *ERIC Acquisitions Arrangements* (EAA) list. The responsibility for maintaining a permanent file of Reproduction Releases, and for ensuring the accuracy of copyright information on the processed documents, rests with the Clearinghouses.

Many questions arise concerning copyright and reproduction release matters. The following points speak to the most common problems. For problems not covered below, contact Central ERIC.

a. Public Domain

A document issued without a copyright notice may be registered by the author prior to or within a five-year period after the date of public distribution. If the work is not registered within this period, then the document is considered to be in the public domain.



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

REPRODUCTION RELEASE (Specific Document)

I. DOCUMENT IDENTIFICATION

Title: _____ Date: _____
Author(s): _____
Corporate Source (if appropriate): _____

II. REPRODUCTION RELEASE

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the options and sign the release below.

CHECK HERE →

Microfiche
(4" x 6" film)
and paper copy
(8½" x 11")
reproduction

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

[PERSONAL NAME OR ORGANIZATION]

AS APPROPRIATE

OR

Microfiche
(4" x 6" film)
reproduction
only

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

[PERSONAL NAME OR ORGANIZATION]

AS APPROPRIATE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

SIGN
HERE →

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Signature: _____ Printed Name: _____
Organization: _____

Address: _____ Position: _____

Tel No.: _____ Zip Code: _____

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If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

Publisher/Distributor: _____
Address: _____

Price Per Copy: _____ Quantity Price: _____

IV. REFERRAL TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

EFF-53 (Rev. 8/80)
GPO 872 060

FIGURE II-16: ERIC REPRODUCTION RELEASE (SPECIFIC DOCUMENT)



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

REPRODUCTION RELEASE (Blanket)

I. **DOCUMENT IDENTIFICATION** (Class of Documents)

All publications: _____
Series (Identify Series): _____
Division/Department Publications (Specify): _____

II. **REPRODUCTION RELEASE**

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). To reduce the number of individual requests that must be made for reproduction release, ERIC attempts where feasible to obtain a blanket release for all documents submitted by an organization. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the above class of documents please CHECK ONE of the options and sign the release below.

CHECK HERE ↗

Microfiche
(4" x 6" film)
and paper copy
(8½" x 11")
reproduction

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
AS APPROPRIATE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

OR Microfiche
(4" x 6" film)
reproduction
only

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
AS APPROPRIATE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed in both microfiche and paper copy.

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"I hereby grant to the Educational Resources Information Center (ERIC) permission to reproduce the Class of Documents indicated above. Reproduction by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction of microfiche by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: _____ Printed Name: _____
Organization: _____ Position: _____
Address: _____ Tel No.: _____
_____ Zip Code: _____

III. **DOCUMENT AVAILABILITY INFORMATION (Non-ERIC Source)**

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

Publisher/Distributor: _____
Address: _____

Price Per Copy: _____ Quantity Price: _____

IV. **REFERRAL TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER**

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

EFF-57 (Rev. 9/80)

FIGURE II-17: ERIC REPRODUCTION RELEASE (BLANKET)

ERIC

EDUCATIONAL RESOURCES INFORMATION CENTER



Clearinghouse on Higher Education

THE GEORGE WASHINGTON UNIVERSITY

The Clearinghouse on Higher Education is pleased to notify you that the publication your organization sent to be considered for announcement in Resources in Education has been accepted. However, even though the document does not contain a copyright notice, we do need to have you sign the enclosed Request for Reproduction Release. The need for this release is a result of the new copyright law effective January 1, 1978. As you may know, the new law states that any document issued without a copyright notice may still be registered by the author or organization within a five-year period from date of public distribution. Therefore, it is an ERIC system policy that we must receive a copyright release before any document can be announced in Resources in Education and made available in microfiche or hardcopy form.

As an alternative to this individual release, you may indicate that you will grant us a blanket release. By signing a blanket release you are granting permission to ERIC to automatically include in the system this and all future publications that you send to us. This would eliminate delay in processing your material. If this agreement is acceptable, please just sign the enclosed Blanket Reproduction Release form.

Your response to this matter will be greatly appreciated. Please send the completed form to the Clearinghouse address, not to NIE.

Thank you for submitting material to the ERIC system. I look forward to receiving reports from you and your organization in the future.

Sincerely,

Marilyn Scutt Shorr
Assistant Director

Enclosure

SUITE 630 / ONE DUPONT CIRCLE / WASHINGTON, D. C. 20036 / (202) 296-2597

FIGURE II-18: TYPICAL LETTER SENT TO CONTRIBUTORS BY CLEARINGHOUSES TO INFORM THEM OF DOCUMENT ACCEPTANCE AND TO REQUEST A REPRODUCTION RELEASE

b. Announcement Without Reproduction

It is considered legally permissible to abstract (at the length provided for by ERIC guidelines) and to announce copyrighted documents at Level 3, whether or not a reproduction release has been obtained. Announcement alone does not violate copyright. However, ERIC does not announce any document unless users can be referred to a source of availability.

c. Multiple Authors

If a document having multiple authors requires a release form, a signed release from any one of the authors is considered sufficient.

d. GPO and NTIS Documents

Documents printed by GPO or NTIS, which do not carry a copyright notice, do not require a copyright release. They are assumed to have been generated with Federal government funding under terms which either place them in the public domain or else reserve a free right of reproduction for U.S. Government purposes.

e. Speeches

Speeches written and/or delivered in the author's private capacity require a release. Speeches written by an employee of the Federal Government, operating in an official capacity, do not require a release. Speeches written by a Federal employee, and bearing a copyright notice, must be checked with Central ERIC.

f. State Documents

State funded documents, whether bearing a copyright notice or not, require a release form.

g. International Foreign Copyright

Copyright under the Universal Copyright Convention is indicated by the © symbol. However, since there are numerous other bilateral and multilateral agreements between countries affecting the copyright picture, it is advisable to handle foreign documents the same as domestic documents as far as permissions and releases are concerned. In other words, the presence or absence of the © symbol should not affect the decision to seek a release.

h. Journal Article Publication

Documents generated with Federal Government funding are in the public domain. Such documents may later be published as

journal articles, but will often carry a notice (e.g., a footnote) reserving the Government's right to reproduce and/or excluding them from the overall journal issue copyright.

i. Federally Funded Documents (Including Contractor Reports)

Federally funded documents fall under the copyright law just as do private sector documents. The difference is that the Government reserves the right to reproduce for its own purposes all Federally funded documents. Reproduction by ERIC is considered "for Government purposes." This includes, for example, the federally funded but copyrighted documents of states, local governments, and school districts. It also includes the instances where a Government agency has granted a contractor the right to copyright a given document for a limited period of time (perhaps to facilitate dissemination objectives).

It is therefore possible to construct the following decision matrix:

	No Copyright Notice	Copyright Notice
Federally Funded	No Release Necessary	Check with Central ERIC
Not Federally Funded	Release Necessary	Release Necessary

As can be seen, Federal documents bearing a copyright notice should be checked with Central ERIC to determine whether a release is necessary. If in doubt, or if some questionable variation of this situation occurs, Central ERIC should also be contacted.

j. Letter in Lieu of Release

At the present time, a letter giving ERIC permission to reproduce an accompanying document is not sufficient no matter how explicit the letter may be. ERIC policy is that a *Reproduction Release (Blanket)* or a *Reproduction Release (Specific Document)* must be obtained to cover every document that is not federally prepared or federally supported.

k. Copyrighted Segments of a Document

Some documents contain segments copyrighted by someone other than the producer of the document. The document may be left intact if:

- ERIC has permission from the segment's copyright holder; or

- the segment is small in relation to the overall work from which it is taken, so that its reproduction would be allowable under the copyright law's "fair use"; or
- the original permission obtained from the segment author by the producer of the document in hand (containing the segment) is broadly stated (i.e., not restricted to one publisher) and can be assumed to extend to all printings, reprintings, and other forms of the document in hand, including its duplication in ERIC.

In general, documents should be left intact whenever possible, for the benefit of the user.

9. Non-U.S. Documents

Documents not available from sources in the United States, including documents in non-English languages, may be acquired and selected for ERIC, but must meet more stringent criteria for quality and availability/reproducibility. In addition, it is highly recommended that non-English language documents should, if at all possible, be accompanied by a 1,000-1,500 word summary in English for the benefit of searchers not proficient in the language of the text.

The acquisitions/selection criteria, and other policies and guidelines pertaining to foreign documents, have been formalized by a special ERIC committee and are provided here verbatim (see Figure II-19).

10. Recordkeeping

Acquisitions statistics are used primarily to facilitate the acquisitions effort and to permit Clearinghouses to identify organizations, conferences, authors, and other sources, which are prime sources of documents. While recordkeeping practices vary from Clearinghouse to Clearinghouse, all should be evaluated and justified in terms of their utility and effectiveness in helping to bring documents into the system.

The following categories of information or statistics, kept for this purpose, have been reported by Clearinghouses:

- Types of contributors;
- Types of documents received;
- Subject areas of documents received;
- Documents requested via the Facility;
- Documents arriving with reproduction releases;

FOREIGN DOCUMENTS
Policies and Guidelines for
Acquiring and Selecting Foreign Documents for the ERIC System

1. PURPOSE

To assist Clearinghouses in acquiring and selecting foreign documents; and to assist foreign nationals, international organizations, intergovernmental agencies, foreign ministries of education, and other foreign government agencies in submitting documents to ERIC.

Rationale:

Acquisition of foreign documents is a cooperative venture between the Facility and the Clearinghouses. The Facility maintains agreements with foreign ministries of education and international organizations on behalf of the ERIC system. Selection is a Clearinghouse function. These policies and guidelines, together with those in the *ERIC Processing Manual*, should help to establish some consistency of foreign document input.

2. DEFINITION OF FOREIGN DOCUMENTS

Foreign documents are publications which are produced in a foreign country or by an international agency. Foreign documents may or may not be in a foreign language.

Rationale:

This definition is an attempt to differentiate between a foreign document and a foreign language document. Some foreign language documents are produced in the U.S. There are many foreign documents in English. The new GEO, GOVE, and LANG data elements will help to promote acceptance of this definition.

3. LANGUAGE OF THE TEXT

When a document is not in English (whether it is foreign or domestic), it should ideally be accompanied by a 1,000-1,500 word summary in English.

Rationale:

ERIC is an English language information system. In order to better serve the user population, a more complete summary of documents in foreign languages should be provided than that available in a 200 word abstract. Therefore, a 1,000-1,500 word English summary, prepared by the individual or organization submitting the document, should accompany each foreign document as an integral part of that document. A 1,000 word summary is often adequate to characterize the essential content of shorter documents received from foreign sources. Exceptions to the requirement of an English-language summary may be made when the potential users of the document are expected to be familiar with the language of the document; this would apply particularly to users of documents submitted by the Language and Linguistics Clearinghouse.

4. QUALITY OF CONTENT

Foreign documents should meet higher quality criteria than those applied to domestic documents. Each Clearinghouse is encouraged to review its unique acquisition policies in regard to foreign documents and to develop its own priorities and special guidelines.

Rationale:

For there to be as little criticism as possible in regard to the inclusion of foreign documents, the significance and quality of foreign documents should be well above the level considered to be necessary for domestic documents.

5. TECHNICAL REQUIREMENTS (PERTAINING TO REPRODUCIBILITY)

All foreign documents should meet the technical standards required of all domestic documents. Such standards are concerned with reproducibility, legibility, physical quality, and page size. The *ERIC Document Reproducibility Guidelines* should be followed.

Rationale:

There is no reason to vary technical physical standards from those currently in force.

6. TYPES OF DOCUMENTS

Documents to be considered from foreign sources will be the same as those considered from domestic sources, except for the following types which are not encouraged for submission: resource guides, legislation and regulations, brochures, and pamphlets. There will be exceptions, but as a general rule those items which are easily dated, of highly specific local use, and which list resources generally available only in a foreign country, should receive lower priorities.

Rationale:

Each Clearinghouse will ultimately make its own selection decision, but as a general guideline there are certain documents, such as those mentioned above, which appear to be of lower priority than others.

7. LEVEL 3 DOCUMENTS

In general, Level 3 selections are not an option. Levels 1 and 2 should be thoroughly explained to foreign contributors. The Level 3 option should never be used unless a reliable source of copies can be identified.

Rationale:

Foreign Level 3 documents should be discouraged even more than domestic Level 3s. One way to do this is not to describe the option. However, there are rare times when foreign Level 3 documents should be included. This policy permits limited inclusion, but strongly discourages solicitation of such documents.

FIGURE II-19: FOREIGN DOCUMENTS

- Productivity of second request follow-up efforts;
- Solicitations returned due to incorrect address;
- Reasons for rejection of documents;
- Number of returns for each conference solicited;
- Reproducible documents received (versus non-reproducible receipts)
- Organizations tending to submit acceptable documents (versus those submitting rejected documents);
- Organizations submitting documents on the basis of agreement (or periodically). Periodic reminders or follow-ups to those organizations are necessary.

Clearinghouses gather information both manually, and in some cases, by computer. Examples of some typical Clearinghouse recordkeeping forms are seen in Figures II-20 & 21.

11. Reporting to Central ERIC

The following statistics for Clearinghouse acquisitions efforts are required by Central ERIC to be reported on a quarterly basis and at the annual review:

- Total documents acquired;
- Total solicitations;
- Number of acquired documents solicited;
- Number of acquired documents unsolicited;
- Number of documents selected for RIE;
- Number of documents selected for local files;
- Number of documents rejected;
- Number of documents transferred (to other Clearinghouses).

For more detail on reporting requirements, see Section 7.3 of the *ERIC Administrative Procedures Manual*.

F. ERIC Facility Acquisitions Program

1. Scope and Purpose

The ERIC Facility Acquisitions Program was initiated for the following reasons:

- to increase the flow of documents to the Clearinghouses from certain sectors (Federal, State, and International);
- to build a foundation of automatic acquisition/distribution arrangements;

DOCUMENT TIME DATA

IR _____

<u>Activity</u>	<u>Initials/Date</u>	<u>Time</u>	<u>Comments</u>
Thank You Notice Sent	_____	_____	_____
Duplicate Checking	_____	_____	_____
Faculty Evaluation	_____	_____	_____
Document Preparation			
ADR	_____	_____	_____
Cataloging	_____	_____	_____
Control Card	_____	_____	_____
Reading/Scan	_____	_____	_____
Indexing	_____	_____	_____
Abstracting	_____	_____	_____
Informative []			
Indicative []			
Mixed []			
Typing	_____	_____	_____
Indexing Check	_____	_____	_____
Editing 1	_____	_____	_____
2	_____	_____	_____
OCR Keying	_____	_____	_____
OCR Proofing	_____	_____	_____

FIGURE II-20: TYPICAL EXAMPLE OF A CLEARINGHOUSE RECORDKEEPING FORM
(EXAMPLE 1)

ERIC/TM DOCUMENT CONTROL FORM

Cardfile
 ADR _____ Month
 79 Title Index
 77-78
 66-76
 Related Documents

SELECTIONACCEPT _____ / _____ PRIORITY A B C RUSH

NEED SECOND OPINION _____ / _____

TRANSFER _____ / _____ TO _____ RETURN REQUESTED YES
 NO

REJECT _____ / _____ Specify reason - see reverse side.

COMMENTSSCREENING

LEGIBILITY CHECK _____ TEXT _____ APPENDICES _____ / _____

PHOTOCOPY _____ / _____

SUPPLEMENTAL

<u>HOLD--REQUEST:</u>	<u>BETTER COPY RELEASE</u>	<u>2nd COPY</u>	<u>MATERIAL</u>	<u>OTHER</u>
letter sent				
followup				
received				

READY TO PROCESS: AT LEVEL _____ DATE SHIPPED _____

AUTHORITY: _____ repro rel _____ acq argmt _____ cover letter _____ otherFIGURE II-21: TYPICAL EXAMPLE OF A CLEARINGHOUSE RECORDKEEPING FORM
(EXAMPLE 2 - PAGE 1 of 2)

ERIC / TM SELECTION GUIDELINES

DATE INITIALS

1. Duplicate to _____
2. Not within scope of RIE. Little or no applicability to education.
3. Format inappropriate:
 journal article
 dissertation without Level I or II release
 newsletter
 commercial test materials with no release
 book available from major publisher
 promotional materials
 other: explain
4. Will be published as a journal article. Cite if known.
5. Submitted to journal. Publication decision pending. Cite if known.
6. Too old (written 5 or more years ago and is not a landmark document).
7. Too short - less than 6 pages. If substantive, permission of monitor required to input.
8. Additional documentation required.
9. Is not substantive. Does not add to the data base.
10. Information already in data base.
11. Document poorly prepared - incomplete, garbled, not outlined, etc.
12. Major problems in study design, poor quality.
13. Of local interest only.
14. No reply to letter requesting resolution of problems.

COMMENTS:

FIGURE II-21: TYPICAL EXAMPLE OF A CLEARINGHOUSE RECORDKEEPING FORM
(EXAMPLE 2 - PAGE 2 of 2)

- to serve as an expeditor for the complex area of Federal Government documents (where being in the Washington area is important);
- to coordinate network acquisition efforts and help avoid redundancy and confusion (e.g., by such means as the maintenance of the *ERIC Acquisitions Arrangements list*);
- to eliminate multiple solicitations by various network components to one Government agency, State Department of Education, or other organization dealing broadly with the field of education.

Facility efforts are concentrated in the following areas:

- Federal Agencies;
- State Departments of Education;
- Foreign Ministries of Education;
- International and Intergovernmental Organizations;
- Professional Associations or other entities covering education broadly (e.g., NEA).

In addition, certain organizations, on their own initiative, have approached the Facility for liaison in the acquisitions area.

The Facility makes arrangements with the NIE-sponsored educational laboratories and research and development centers to receive directly all of their reports which are approved for public dissemination. In addition, the Facility receives all Department of Education input from Central ERIC and all unsolicited input arriving at Central ERIC or EDRS. All such documents are assigned to appropriate Clearinghouses for processing. The Facility maintains the *ERIC Clearinghouse Scope of Interest Manual* (see Appendix A) on the basis of information received from the Clearinghouses.

The Facility functions in direct support of the Clearinghouses by obtaining for them centrally the documents of organizations whose programs cover the entire spectrum of education. The Facility also functions in many respects as an agent of Central ERIC. It receives direct requests for action from Central ERIC involving both automatic arrangements and specific documents. It works closely with Central ERIC in an effort to see that all Department of Education internal reports are obtained for the system. Visits to Government agencies to establish arrangements are often made by Central ERIC and Facility staff working together. Special acquisition projects are often assigned to the Facility by Central ERIC.

Facility acquisitions are intended to augment and supplement the main ERIC acquisitions effort, which resides at the Clearinghouses.

2. Sources of Documents

a. Central ERIC

All Department of Education and unsolicited documents acquired by Central ERIC are delivered to the Facility by daily courier for recording and assignment to Clearinghouses. The Facility is frequently asked by Central ERIC to report on the receipt or status of particular documents and to expedite PRIORITY documents. The Facility requests certain Department of Education documents from Central ERIC by title. The Facility refers all policy questions concerning copyright or reproduction release to Central ERIC. Central ERIC refers organizations and individuals to the Facility for follow-up acquisitions contacts. In some cases, arrangements are initiated by Central ERIC and completed by the Facility. Before contacting State Departments of Education or foreign ministries of education, the Facility first obtains Central ERIC approval.

b. Automatic Distribution Arrangements

(1) ERIC Facility Acquisitions Arrangements (EFAA's)

The Facility maintains an on-going effort to contact education-related organizations in its area of responsibility in order to enter into agreements with them to receive relevant publications on a regular basis and to secure Blanket Reproduction Releases, where appropriate. After determining that an organization is willing to cooperate, details are worked out and the following steps are taken:

- a signed release form (if necessary) is obtained;
- Reply Cards are offered; and
- informational ERIC materials are sent to the new contributor.

When documents begin arriving:

- the organization is given a number and listed as an EFAA and
- a copy of all documentation is submitted to Central ERIC.

All EFAA's are listed numerically in the periodic EFAA List (see Figure II-22). Organizations whose acquisitions arrangements are inactive are identified on the list by an asterisk. Arrangements become inactive for a variety of reasons: defunct, publication discontinued, loss of contact, etc. Therefore, EFAA's are continuously monitored to determine whether publications are still being received. Notification of new EFAA arrangements or changes in established arrangements are announced each month in the *ERIC Administrative Bulletin*.

(2) Exchange Arrangements

In order to establish acquisitions arrangements with certain large international organizations and foreign ministries of education, the Facility is authorized, subject to Central ERIC approval, to offer a one year complimentary subscription to RIE in exchange for the organization's publications. This type of arrangement is closely monitored to ensure that ERIC receives a commensurate number of appropriate documents.

(3) Standing Orders

In certain cases, the Facility enters into standing order arrangements in order to obtain desired publications not available in other ways. The principal current example is the standing order with UNIPUB to obtain education-related UNESCO sales publications for Level 3 announcement in RIE.

c. Specific Requests

Many organizations do not maintain distribution lists or do not produce enough documents of interest to ERIC to warrant establishing an acquisitions arrangement. Documents from organizations for this type must be acquired on a title-by-title basis. For this purpose, the Facility employs form letters, free copies of ERIC publications, and generally includes a request for Reproduction Release.

Requests for specific titles are generated either by requests from the Clearinghouses or by scanning the serial publications, newsletters, and brochures of organizations within the Facility's scope.

(1) Clearinghouse Requests

Clearinghouses are requested to ask the Facility for documents they wish to obtain from any organization with which the Facility has an existing arrangement, or from any branch of the Federal Government. The Facility

ERIC FACILITY ACQUISITIONS ARRANGEMENTS

EFAA NUMBER	CONTRIBUTING INSTITUTION	PRESCRIBED LEVEL OF INPUT
1*	National Institutes of Health	1
2*	Library of Congress, Exchange and Gift Division	1
3	District of Columbia Public Schools	1
4	Library of Congress, Division for the Blind and Handicapped	1
5	General Accounting Office	1
6	Employment and Training Administration (DOL)	1
7	Administration on Aging	1
8*	Department of Labor: Child Labor Division	1
9	Bureau of Labor Statistics (DOL)	1
10	Women's Bureau (DOL)	1
11	President's Committee on Mental Retardation	1
12*	Senate Select Committee on Equal Educational Opportunity	1
13	National Institute on Drug Abuse, National Clearinghouse for Drug Abuse Information	1
14*	National Park Service: Office of Environmental Interpretation	1
15	Consumer Services Administration (CSA)	1
16*	White House Conference on Aging	1
17*	National Endowment for the Humanities	1
18*	President's Commission on School Finance	1
19*	Regional Economic Coordination Council	1
20*	Office of Child Development, Child Care Program	1
21*	Office of Child Development, Home Start Program	1
22	Advisory Commission on Intergovernmental Relations	1
23*	Agency for International Development	1
24	National Reading Center	1
25*	Surgeon General's Scientific Advisory Commission on TV and Social Behavior	1
26*	U.S. National Commission for UNESCO	1
27	Office of Consumer Affairs	1
28*	Small Business Administration: Education Division	1
29*	Office of New Careers	1
30*	Federal Communications Commission	1
31	Commission on Civil Rights (CCR)	1
32	Office of Naval Research (ONR)	1
33*	New England Program in Teacher Education	1
34	Organisation for Economic Cooperation and Development (OECD) (France)	1 or 2
35	Toronto Board of Education (Canada)	1
36*	Dade County Public Schools	1
37	National Center for Health Statistics	1
38	Civil Service Commission (CSC) Bureau of Training	1
39	Schools Council (UK)	1 (free)
40*	Federal Aviation Administration	1
41	National Institute of Mental Health, Mental Health Study Center	1
42*	University of Pittsburgh: University-Urban Interface Program	1
43	Air Force Reserve Officers Training Corps (DOD)	1
44	National Center for Health Services Research	1
45	Human Resources Research Organization (HumRRO)	1

* inactive

FIGURE II-22: ERIC FACILITY ACQUISITIONS ARRANGEMENTS LIST (SAMPLE PAGE)

will either obtain the documents or let the Clearinghouse know if they are unavailable. Central ERIC also occasionally requests the Facility to obtain specific titles.

(2) Scanning

Serial publications, newsletters, and brochures of the organizations within the Facility's scope are regularly scanned. GPO's *Monthly Catalog of Government Publications* is reviewed cover-to-cover every month for education-related documents. NTIS's *Government Reports Announcements* (GRA) is also scanned (particularly Section 5) for this purpose. In each case, the Facility first attempts to obtain relevant documents from the original source before considering purchase.

Publication lists, news releases, etc., outside the Facility's scope of interest are forwarded to the appropriate Clearinghouses.

3. Assignment of Documents to Clearinghouses

All documents received by the Facility are assigned to the single most appropriate Clearinghouse for evaluation and selection. The proper assignment is determined by reference to the Facility-maintained *ERIC Clearinghouse Scope of Interest Guide*. When a document overlaps the scope of two or more Clearinghouses, the Facility assigns the document to the Clearinghouse with, in its judgment, the strongest claim to jurisdiction over the subject matter of the document. However, a copy of the Title Page is transmitted to the other interested Clearinghouses, together with a sticker (Figure II-23) indicating where the basic assignment was made. The sticker serves to alert those Clearinghouses that might like to question the assignment; it also tells the Clearinghouse receiving the document that care should be taken in indexing to reflect the interests of the related Clearinghouses.

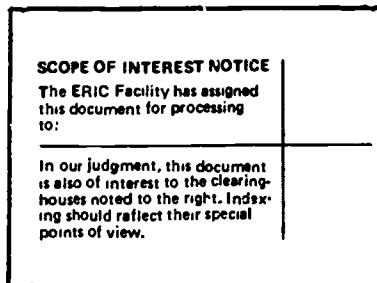


FIGURE II-23: SCOPE OVERLAP STICKER

No selection decisions are made at the Facility. All documents received are assigned. Even flyers, brochures, news releases, and handouts are forwarded to the Clearinghouses for their information (though such materials are not part of the statistical count of documents assigned).

4. ERIC Acquisitions Arrangements (EAA) Systemwide List

The Facility publishes semiannually a cumulative systemwide list of all Clearinghouse and Facility acquisitions arrangements. Entries cite the name of the organization, date of contact, level of reproduction release, authorization, authorizing person, and any additional explanatory notes. The list includes all organizations whose materials are regularly and routinely acquired by ERIC and its use helps to prevent duplicate acquisitions efforts and to facilitate the exchange of release forms.

5. Standard Forms Used By The Facility

A number of forms, cards, and stickers or labels are used by the Facility to help expedite work flow.

a. Form Letters

The Facility uses several form letters to serve a variety of recurring needs: e.g., "Request for Specific Document(s)," "General Solicitation," "Thank You Letter" (see Figures II-24, II-25, and II-26, respectively). On occasion, special form letters are prepared to meet specific needs: e.g., National Diffusion Network (NDN) needs (see Figure II-27).

b. Reply Cards

The Facility has a Standard Reply form which is used when disposition information is requested by the contributor. These forms are provided to contributors to affix to incoming documents, but contributors are encouraged to provide their own cards. On occasion special Reply Cards are prepared to meet specific needs, e.g., State Education Agency submissions, NDN submissions, (see Figures previously listed).

c. Reproduction Release Forms (Blanket and Individual)

The Facility is responsible for the two Reproduction Release forms used by the system. Modifications are made at Central ERIC's direction and supplies of both forms are stocked by the Facility. (See Figures previously listed.)

6. Recordkeeping

The acquisitions effort requires a number of files. Only those most relevant to external ERIC components will be described here.

a. In-Process File

A title card file is maintained of all documents coming into the Facility, whether solicited or unsolicited. This file is purged so as to contain only the last two years of data; the



PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723

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The Educational Resources Information Center (ERIC) is a nationwide computer-based information system funded by the National Institute of Education to obtain and screen documents relevant to the field of education for inclusion in the monthly abstract journal, Resources in Education (RIE). These reports are then made available to our users in microfiche and paper copy through the ERIC Document Reproduction Service (EDRS). May we please have a complimentary copy (two, if possible) of the following to consider for RIE? If we may make the document available to ERIC users, please fill out and return the enclosed Reproduction Release form with the complimentary copy.

Your attention to this request is appreciated. We will notify you if the document is selected for RIE and we welcome other reports that you wish to deposit in the ERIC data base.

Very truly yours,

(Mrs.) Grace Sundstrom
Acquisitions Librarian

Enclosure

FIGURE II-24: ERIC FACILITY FORM LETTER—REQUEST FOR SPECIFIC DOCUMENT(S)



PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723

OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION by ORI, Inc., Information Systems Division

The subject matter encompassed in this project is of interest to the Educational Resources Information Center (ERIC), of the National Institute of Education (DHEW). If you would be kind enough to forward two clear copies of the final report or other documents resulting from the project, such materials will be evaluated for possible abstracting and announcement in Resources in Education (RIE).

Under the sponsorship of the National Institute of Education, ERIC is a decentralized network of clearinghouses designed to bring information about education to the attention of educators and researchers. Through the Government Printing Office, ERIC publishes the monthly abstract journal, RIE, which announces recently completed reports of interest to the educational community.

If selected, the results of your work will be disseminated around the world automatically on microfiche to over 600 education-oriented organizations and in machine-readable form to the many subscribers to the ERIC tapes. Individuals who learn of your work through the RIE announcement can order the document from the ERIC Document Reproduction Service (EDRS) in either paper copy or microfiche. Therefore, should your own supply be exhausted, you can always refer requests for reprints to EDRS.

Thank you for your cooperation.

Yours truly,

(Mrs.) Grace Sundstrom
Assistant Acquisitions Librarian

GS:sep

P.S. There is no fee for placing documents in the ERIC system.

FIGURE II-25: ERIC FACILITY FORM LETTER—GENERAL SOLICITATION



PROCESSING AND REFERENCE FACILITY

4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723

OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION by ORI, Inc., Information Systems Division

We acknowledge with thanks receipt of the material you recently submitted to the Educational Resources Information Center (ERIC). We sincerely appreciate your contribution. The material will be assigned to the most appropriate Clearinghouse where it will be evaluated for announcement in the abstract journal, Resources in Education (RIE). Please allow four to five months between receipt of material and, if selected, final announcement in RIE.

If you have available or develop other reports you believe would be of interest to educators, we would also like to receive two copies of each of these documents for the ERIC system.

Thank you for your interest in ERIC.

Very truly yours,

(Mrs.) Grace Sundstrom
Acquisitions Librarian

GS/1j

FIGURE II-26: ERIC FACILITY FORM LETTER—THANK YOU LETTER



PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723

OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION by ORI, Inc., Information Systems Division

Dear Colleague:

The Educational Resources Information Center (ERIC) invites all National Diffusion Network D/Ds and SFs (Developer/Demonstrators and State Facilitators) to submit NDN-related materials to ERIC.

USOE's Division of Educational Replication is interested in seeing that as many NDN materials are submitted to ERIC as possible. It is believed that ERIC can assist in making school people aware of the NDN, its publications, services, and Exemplary Programs. In addition, both NDN and ERIC are continuing to explore how NDN participants may use the ERIC system as a resource to improve their own effectiveness.

In August 1978, at the National Dissemination Forum, "Guidelines for Submitting NDN Materials to ERIC" were distributed. Additional copies of these guidelines are available from the ERIC Facility upon request. To facilitate your submission of documents, we are enclosing two "ERIC Reply Cards," two "Reproduction Release Forms," and a "Blanket Reproduction Release Form." When you submit a publication, please use these forms as indicated:

- *ERIC Reply Card*
Complete and return one card per document submitted. Once disposition of your publication is determined, the card will be returned to you.
- *Reproduction Release Form*
Complete one form per document and attach to the document, OR, use the Blanket Reproduction Release Form.
- *Blanket Reproduction Release Form*
Complete this form when submitting a large quantity of material.

Let us know when you need additional copies of any of these forms.

ERIC sincerely appreciates the effort made by all the D/Ds and SFs who have already submitted documents to ERIC. Currently, a computer search is underway to identify all NDN documents already in ERIC. The results will be compiled into a bibliography and made available to ERIC system users on a world-wide basis.

If you have any questions concerning the submission of NDN documents to ERIC, please feel free to call or write us at the ERIC Facility or contact one of the NDN-ERIC liaison committee members listed in the June NDN newsletter.

Very truly yours,

Grace Sundstrom
(Mrs.) Grace Sundstrom
Acquisitions Librarian

FIGURE II-27: ERIC FACILITY FORM LETTER—NATIONAL DIFFUSION NETWORK

older cards are archived. This file records the title, date received, Clearinghouse assignment, and any other important information, providing a duplicate check and a measure of location control over all Facility receipts.

b. Acquisitions Arrangements File

Individual files are kept on each formal acquisitions arrangement, including all correspondence and all Reproduction Release information.

7. Reporting to Central ERIC

The following reports are provided to Central ERIC:

- Acquisitions Department activities are reported in the Facility's biweekly *Narrative Report* to Central ERIC.
- Acquisitions statistics are reported in the monthly *ERIC Facility Statistics Report* and the quarterly *Acquisitions Summary Report*.
- Special ad hoc reports are prepared throughout the year, at Central ERIC's request, on such subjects as SEA receipts, foreign receipts, NEA receipts, NDN receipts, etc.

8. Miscellaneous

a. Women's Educational Equity Communications Network (WEECN)

The Facility regularly receives documents from WEECN. The documents come with a special instruction sheet explaining WEECN's interests. These documents are handled as regular input.

b. National Diffusion Network (NDN)

The Facility cooperates with NDN in an effort to see that all NDN documents are considered for input to ERIC. The Facility has prepared special form letters for soliciting new documents, special Reply Cards, and a sheet outlining the special handling and processing NDN documents should receive.

c. Alerting Services

Occasionally, the Facility will engage in activities calculated to alert the Clearinghouses to new publications of interest, e.g., Library of Congress proof sheets (for new 3x5 catalog cards); Baker & Taylor Current Awareness Service, etc. In all such cases, the responsibility for deciding upon further acquisitions action rests with the Clearinghouse.

G. Current Index to Journals in Education (CIJE)

CIJE deals with journal articles, not the report literature. Acquisitions for CIJE deal, therefore, with subscriptions to appropriate journals.

The CIJE Contractor maintains a complete list of all journals currently covered on a regular basis, comprehensively or selectively. This list is published as the "Source Journal List" in each monthly issue of CIJE. (As of January 1980 this list cited 876 journals.)

Each journal covered is assigned, wherever possible, on the basis of its subject matter, to a single ERIC Clearinghouse. Journals that cover more than one area of the field of education and journals that fall outside the scope of any existing Clearinghouse are assigned for coverage to the CIJE Contractor. The "Source Journal List" identifies the organization responsible for each journal. The responsible ERIC component must subscribe to the journal (or obtain a complimentary subscription) and must ensure that all issues are obtained and screened. (See Figure II-28 for Clearinghouse request for complimentary journal subscription.) It is worth emphasizing that when a Clearinghouse is responsible for a given journal it is responsible for *all* education-related articles in that journal and not just those within its scope.

New journals are the responsibility primarily of the Clearinghouses; however, a new journal may be nominated for coverage by any ERIC component. Information concerning a candidate journal should be sent, together with any supporting information, to the relevant Clearinghouse. If the relevant Clearinghouse cannot be determined, the candidate should be sent to the ERIC Facility which, in conjunction with Central ERIC, will make this determination.

The responsibility for deciding whether to cover a new journal rests with the Clearinghouse. When the total number of journals covered by CIJE is considered by the CIJE Contractor to be at a maximum, it will generally be necessary to delete a marginal journal in order to add a significant journal. If it is necessary, in the opinion of the Clearinghouse, to add a new journal without a corresponding deletion, justification for this decision should be sent to the Central ERIC monitor of CIJE.

Journals covered by CIJE can be classified into three groups:

1. Comprehensively Covered Journals

Journals of high quality that are concerned entirely with the field of education are processed "cover-to-cover," i.e., all articles are cataloged and indexed. This excludes editorials, letters to the editor, schedules of events, newsletters, book reviews, regular columns, and advertising. It is useful to the practicing educator, reference librarian, educational researcher,

COMPLIMENTARY JOURNAL
SUBSCRIPTIONS



Clearinghouse on Teacher Education

ONE DUPONT CIRCLE, N.W., SUITE 616 • WASHINGTON, D.C. 20036 • 202/293-7280

SPONSOR



American Association of Colleges for Teacher Education (fiscal agent)

Dear Editor:

SPONSOR



American Alliance for Health, Physical Education, and Recreation

The ERIC Clearinghouse on Teacher Education would like to request a complimentary subscription to your journal in order to keep up-to-date on publications and conferences in the field of education. Occasionally, important articles from our complimentary subscription list are indexed in our monthly publication, Current Index to Journals in Education.

SPONSOR



The Association of Teacher Educators

We are funded by the National Institute of Education to collect education documents and make them available to readers through a computerized retrieval system. The particular scope of interest of this clearinghouse covers teacher education, physical education, and health and recreation education.

SPONSOR

Sincerely yours,

nea Agnes Torres

Instruction and Professional Development/
National Education Association

Agnes Torres
Document Processing

In cooperation with the Educational Resources Information Center, National Institute of Education

SCOPE

The preparation and continuing development of elementary, secondary, and collegiate level instructional personnel, their roles and functions; and selected aspects of health education, physical education, and recreation education.

FIGURE II-28: TYPICAL CLEARINGHOUSE REQUEST FOR COMPLIMENTARY JOURNAL SUBSCRIPTION

or other user to be assured that all articles in such journals will be indexed by CIJE. Such journals are indicated by an asterisk in the "Source Journal Index."

2. Selectively Covered Journals

Journals of high quality that, while not concerned entirely with education, regularly contain some education-related articles, are processed selectively, i.e., articles not related to education are excluded, as are the miscellaneous types of materials referred to in the explanation of comprehensive coverage. Journals covered selectively appear in the "Source Journal Index" without an asterisk.

3. "Oneshot" Journals

Journals of high quality that occasionally may contain an article related to education are covered on a "oneshot" basis. These journals are not regularly monitored or indexed by any Clearinghouse. Detecting a relevant article in such a journal will often be accidental and fortuitous. It is permissible for a Clearinghouse to input any good quality, education-related article that may be found in a journal not regularly covered by another Clearinghouse. Journals of this type, from which oneshot articles are chosen, do not appear in the "Source Journal Index."

Articles of this type should be identified by writing "oneshot" in the comments column of the Clearinghouse Accession Log Sheet.

If the journal from which the "oneshot" article is being taken is not well known, it may be helpful to the user to include in cataloging the address of the journal. This decision is up to the Clearinghouse.

If a Clearinghouse finds that it is indexing one or more articles from each issue of such a journal, it should consider the journal for selective coverage status.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 3: SELECTION

October 1980

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION III: SELECTION

SELECTION

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Figure III-1: ERIC Document Transfer Form

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SELECTION

SUMMARY OF SIGNIFICANT RULES

1. All documents selected for announcement in RIE and inclusion in the ERIC data base must have a demonstrable connection with and relevance to the field of education, and to the areas covered by the various ERIC Clearinghouses.
2. Documents acquired anywhere in the system are transmitted on the basis of subject matter to the appropriate ERIC Clearinghouse for processing. Topics not previously included in Clearinghouse scope of interest statements must be allocated as they arise. Scope of interest statements must be constantly revised in order to include any new topics assigned to Clearinghouses.
3. At least one subject-matter specialist (and preferably more) should be involved in the selection process at each Clearinghouse.
4. Quality is the single most important selection criterion. Quality is a composite factor made up of several more specific characteristics, e.g., contribution to knowledge, significance, relevance, newness/innovativeness, effectiveness and thoroughness of presentation, relation to current priorities, timeliness, authority of author, size of audience, etc.
5. Document types have been sorted into three groups: most suitable (for RIE), acceptable (if exemplary), unsuitable. To be selected for RIE, documents must be one of the first two types. For example, research reports are "most suitable," dissertations are "acceptable," non-print materials are "unsuitable."
6. To be selected for RIE, documents must be legible and reproducible. If a document has defective pages, they must either be corrected, or judged not to seriously affect the content of the document, before that document can be selected.
7. Documents that are selected for RIE even though they contain physically illegible or non-reproducible pages (or parts of pages), must bear the legend "BEST COPY AVAILABLE."
8. All documents selected for RIE must be available either from EDRS or from an outside source whose name and address can be cited. Documents that cannot be made available to users should not be selected and announced in RIE.

9. Documents about education and its many associated processes, but not designed for use in an educational context, are desirable documents for ERIC. Documents about a disciplinary or subject-matter area, but not specifically designed for educational use, should have the link to education explicitly drawn in order to be selected.
10. Document preparation activities should be engaged in whenever possible to remedy physical defects that might otherwise disqualify good documents.
11. Selection of brief materials (5 pages or less) for RIE must be reviewed and approved by the Clearinghouse Director.
12. Documents that cannot be reproduced and made available via EDRS (i.e., Level 3 documents) are permissible, but policy is to keep their numbers low. They currently amount to around 5% of any given issue of RIE.
13. Corporation-produced materials must be screened to ensure that they contain valid information for practical use and not just advertising or propaganda.
14. Selection of journal articles for CIJE is based primarily on selection of the journals in which the articles appear. Some journals are selected for comprehensive, cover-to-cover, handling (i.e., all articles are covered). Some journals are designated for selective handling (i.e., only education-related articles are covered).

III. SELECTION

A. Introduction

Documents acquired as candidates for possible announcement in RIE must be subjected to a set of rigorous selection criteria to determine their proper disposition. Although in many cases documents are originally acquired selectively, in most cases the decisions of acquisitions staff are made in the absence of the actual document, and necessarily preliminary to the final selection process. It is the objective of this section to establish standards for judging a document in hand as to the following factors:

- Appropriateness of content/subject matter (to the field of education/scope of Clearinghouse);
- Suitability of format, medium, document type;
- Quality of content;
- Legibility and reproducibility (physical characteristics);
- Availability.

A document meeting the criteria in each of these five areas would be selected for processing and eventual announcement in RIE. A document not meeting the criteria would either be discarded or may occasionally be retained for local collection use. (NOTE: Local collections are not funded by ERIC.)

Failure to satisfy criteria in any one of the areas may be grounds for rejection. Nevertheless, so important to ERIC is the quality of the permanent data base formed from these documents that "Quality of Content" should be regarded as the most important area. A document may satisfy all other criteria, but if the quality is not sufficient it should be rejected. Conversely, a very high quality document may lead selection personnel to override certain problems in legibility, availability, or document type.

Throughout the selection process, the broad range of RIE's audience and the potential users of ERIC materials should be kept in mind. These varied groups encompass many levels of sophistication and represent many different viewpoints. The groups include:

- Educational practitioners (teachers, trainers, therapists, etc.);
- Administrators (principals, superintendents, deans, etc.);
- Policy makers (legislators, community leaders, school board members, etc.);

- Program planners;
- Researchers and scholars;
- Librarians, information and media specialists (including television, computer, audiovisual specialists);
- Counselors;
- Parents;
- Students (at all levels).

The selection process is a Clearinghouse responsibility and may be performed by Clearinghouse staff, Clearinghouse Advisory Board members, or specialists engaged from the field by Clearinghouses to make evaluations and decisions. A multi-person screening committee may be used and is highly recommended. In any case, at least one of the screeners employed should be a subject-matter specialist. Useful recommendations on specific documents may be found in reviews and commentary in published sources and may assist evaluators in the selection process.

Selectors should be thoroughly familiar with the ERIC data base, the ERIC indexing vocabulary, and the mandated scope of interest of the Clearinghouse involved. All selectors should, of course, maintain an on-going awareness of important developments in the particular sector of the field of education covered by their Clearinghouse. Written guidelines for use by selection personnel, and an evaluation form on which they can record recommendations, should be considered in some environments.

The selection of journal articles for announcement in CIJE is subject to somewhat different rules than those for documents because of the interest in covering certain journals comprehensively rather than selectively. See Section III.H for these details.

B. Scope of Interest (Subject Matter)

All documents selected for RIE must pertain in some way to the field of education (and in particular to the areas covered by the Clearinghouses). In the ERIC system, education is subdivided into sixteen major areas with a Clearinghouse in charge of each area. The areas of interest of each Clearinghouse are individually defined in the ERIC *Clearinghouse Scope of Interest Guide* (see Appendix A). The best available definition of the overall field of education for use in these selection criteria is, therefore, the combination of the Clearinghouse scope of interest statements.

1. Education as a Subject Versus the Subject Matter of Education

Education and its many associated processes, such as learning, teaching/instruction, administering, research, etc., are topics that may be dealt with by documents. Examples of such directly education-related topics are school budget management, teaching mathematics,

evaluation of student performance, etc. Documents dealing with such topics are of prime interest to ERIC, in both the acquisitions and selection processes.

A second type of document is not concerned with education per se or the educational process, but rather with its content, i.e., what is taught. Furthermore, this type deals with a topic in a way explicitly intended to be used in a formal educational setting (e.g., a chemistry class laboratory manual). Such documents are specifically designed for use by educators or students, mostly in schools, but clearly to facilitate a learning situation of some kind. Such documents are also of interest to ERIC, though there should be some effort to avoid the repetitive input of essentially the same curriculum materials in different guises.

A third type of document deals with a discipline-oriented topic, but it has not been specifically designed for use in an instructional setting. Such subject-content focused materials present a selection problem. It can be argued that the point of creating documentation of any type is ultimately to use it for educational purposes, and yet ERIC obviously cannot try to serve as a data base for all knowledge or for any document that might by any stretch of the imagination be used by educators or in an educational context. This third type of document must, therefore, necessarily be assigned a lower priority than the first two types; however, Clearinghouses may judiciously select documents closely related to their scope of interest (but not specifically tied to education) if the material is of demonstrable potential utility to the users. Only the highest quality subject matter documents, representing basic curriculum areas, should be selected and only when their potential value to users can be clearly projected. If possible, potential value should be explicitly described in the document abstract.

2. Overlapping Subject Matter

Most documents that are education-related fall unambiguously within the scope of single Clearinghouses. When a document overlaps the scope of two or more Clearinghouses, the Clearinghouses involved must negotiate to determine which one will most appropriately process and input the material. (See Section II.) When one Clearinghouse finds itself in possession of a document which falls within the scope of another Clearinghouse, the document should be transferred promptly and directly to the appropriate Clearinghouse. For this purpose, the Facility provides the *ERIC Document Transfer Form (EFF-70)* (Figure III-1). If a document is transferred more than two times, its subject may be outside ERIC's area of interest. To assist Clearinghouses in transferring documents, the "Index" to the *ERIC Clearinghouse Scope of Interest Guide* may be consulted.

Documents that are extremely broad or basic in their coverage (e.g., *Education in the World Today*) tend to be assigned to the broader, non-subject-oriented Clearinghouses, i.e.:



ERIC DOCUMENT TRANSFER FORM

Date Received: _____ Date Transferred: _____

TO: ERIC/ _____

FROM: ERIC/ _____

The enclosed document(s) appear to be more within your scope than ours.

The document(s) were obtained by (check one):

- solicited contribution
 - unsolicited contribution
 - staff contribution
 - ERIC Facility

Correspondence information is as follows:
(check one):

- all relevant material is attached
 no relevant correspondence; however the name and address of the contributor or contact person is (if known):

Clearinghouse Contact Person

(EFF-70)

FIGURE III-1: ERIC DOCUMENT TRANSFER FORM

- Educational Management;
- Elementary and Early Childhood Education;
- Higher Education;
- Junior Colleges;
- Rural Education;
- Urban Education.

Specialized subject matter areas not specifically included in existing scope of interest statements (e.g., "aesthetic education") are generally assigned, via negotiation and general agreement, to the most likely Clearinghouse and the subject matter areas added to the scope of interest statement at the next revision. The intent is for the network of ERIC Clearinghouses to provide an "umbrella" encompassing the entire field of education, including new emphases, directions, and innovations.

C. Types of Documents

To aid in selecting documents appropriate for RIE, the many different document types have been subdivided into three categories:

- Most Suitable;
- Acceptable;
- Unsuitable.

1. Most Suitable

- Research and Technical Reports (experimental, basic, applied)
(NOTE: See III.G.8.)
- Descriptions
 - Model Programs/Projects/Installations
 - Innovative Practices
 - Product Development (R&D)
 - Implementation and Dissemination Reports
- Evaluation and Study Reports
- Surveys and Statistical Reports
- State-of-the-Art Papers/Reviews
- Syntheses/Interpretations/Summaries
- Bibliographies, Discographies, Filmographies (preferably annotated) (NOTE: See III.G.4.)
- Conference Proceedings and Papers
- Congressional Hearings/Reports/Documents (NOTE: Not Bills)
- Position Papers
- Guidelines (See III.G.7.)
 - Curriculum Guides
 - Practical "How To" Guides
 - Teacher Guides
- Tests, Measurement, and Evaluation Instruments
- State Department of Education Reports

- Documents assigned "PRIORITY" status by Central ERIC (e.g., White House Conference documents)

All Clearinghouse products (Information Analysis Products, etc.) are to be classed as "Most Suitable" and put into RIE, with the following exceptions:

- products which are published in journals (including offprints/reprints of these products)
- short, informal, on-demand bibliographies

One of the major functions of the ERIC data base is to make available NIE and OE contractor reports and other federally-funded education-related documents which might otherwise not be available to the public. Every effort is made to collect these reports, and it is intended that they be given special consideration in the selection process. The documents of state and local education agencies are also of major interest and should be given special attention. (See Section III.G.6.)

All serial publications and journal articles are generally regarded as appropriate for CIJE and not RIE (see Section III.H); however, the following exceptions are suitable:

- journal issues with a single overall theme, so that the issue constitutes, in effect, monographic treatment of the theme;
- conference proceedings (e.g., technical proceedings of annual meetings);
- yearbooks;
- serials of highly irregular publication or limited circulation, so that the issue constitutes, in effect, a unique item.

Journal articles meeting the above special criteria (and the other normal subject content and quality criteria) may be entered into RIE at Level 1 or 2, but not at Level 3. Journal articles that are not reproducible by EDRS should never be entered in RIE, no matter what their other characteristics. Journal articles contained in journals regularly covered by CIJE should also never be entered into RIE.

2. Acceptable

The following types of materials should be selected for RIE *only* when they appear to have wide applicability or when they are exemplary products:

- Standards and Regulations;
- Annual Reports;
- Fiscal Reports (must contain some substantive information);

- Personnel Policies, Recruitment Materials, Employment Agreements;
- Corporation-Produced Materials (see Section III.G.3);
- Materials Produced by Local Agencies (for documents containing primarily information of a local or parochial nature, however, see Section III.G.6).
- Speeches and Presentations;
- Brief Materials (5 pages or less) (See Section III.G.2.);
- Data Collection or Survey Instruments (by themselves);
- Books (commercial publications);
- Manuals;
- Directories (however, frequently reissued directories are unsuitable);
- Newsletters and Bulletins (professional and trade organization containing substantive material);
- Dissertations and Theses (see Section III.G.1).

3. Unsuitable

The following types of documents are considered as unsuitable for RIE. The reasons for unsuitability vary. Journal articles are handled by CIJE. Non-print materials are out-of-scope for physical reasons, but not necessarily substantive reasons. Flyers, brochures, and other ephemera are considered too transitory and without sufficient subject content. Bills, news releases, and interim progress reports are generally preliminary in nature and are later superseded by final documents. Any of the types of documents listed below should usually be rejected:

- Advertising and Promotional Materials;
- Broadsides, Posters;
- Catalogs (Commercial, curriculum);
- Bills (i.e., legislation in process);
- Fiscal Reports (with no substantive information);
- Flyers, Brochures, Ephemera;
- Interim or Preliminary Progress Reports (with no substantive information or that are expected to be superseded);
- Journal Articles (see Section III.H.3);
- News Releases;
- Drafts that will later be superseded;
- Announcements of funding opportunities;
- Non-Print Materials;
- Proposals.

D. Quality of Content

Documents selected for RIE should be of high quality, substance, and significance. The following characteristics all contribute to that elusive and subjective, but most important factor, *quality*. While every document should be examined for these desirable characteristics, not every document can be expected to manifest all features.

1. Contribution to Knowledge; Significance

Substantive contributions to educational knowledge should always be selected for RIE, especially when based on well-designed experiments or orderly collections of data. Research reports, in particular, should be examined in terms of:

- stated objectives;
- hypotheses tested;
- methodology, conclusions, and recommendations.

In order to determine educational significance, subject experts may be consulted, if necessary.

Works by the same author, or coming out of the same program, should be examined to determine if there are any significant new developments, data, or results being reported. It should be kept in mind that negative results may be as contributory as positive results. Likewise, evidence which challenges or contradicts existing knowledge or common opinion can be as useful, or more so, as that which confirms or merely extends what is already known.

The contribution or significance of a document may also be assessed in terms of its purpose. Documents may have large and important objectives where a small amount of new information may have a disproportionately large effect. They may also have very modest objectives, attempting to place one small brick in a very large foundation or structure, the outlines of which are just beginning to emerge.

Papers prepared for learned societies or other special interest groups (e.g., professional organizations) often reflect the moving edge of new research and explorations not yet reduced to formal exposition for purposes of publication.

Documents which the selector believes add to or enhance the knowledge base of the field, or which provide an impetus for further research or action, should be selected for RIE.

2. Relevance

Relevance in this context is defined as the extent to which the document deals with issues that are current, "alive," and of contemporary interest to the educational community.

- Are emerging professional interests and topics treated, e.g., bilingual education, women's equity, metric conversion, etc.?
- Does the document present work on the "frontier" knowledge area of a particular subject, e.g., environmental studies, energy sciences?
- Are answers offered to current social problems, e.g., parent involvement, mainstreaming?
- Does the document provide basic up-to-date and comprehensive background or reference information on a subject?
- Has inclusion of the document been indicated by leadership interest or request, e.g., practitioner-oriented materials?
- Does the document deal with future trends?

3. New Applications of Knowledge; Innovative Practices

There is always a need for documents that describe the application of tested or known methods to new areas or new problems. The selector might ask the following questions:

- Does the document present an older idea, treatment, or application in a new framework or from a new point of view?
- Does the document present a new idea, treatment, or application (perhaps in relation to an older problem)?
- Does the document substantiate or contradict information contained in earlier work?
- Does the document suggest new areas of research?
- Does the document present new hypotheses to be tested?

4. Effectiveness of Presentation; Thoroughness of Reporting

Though it may discuss a well-known subject, a document may add value because it presents the subject with exceptional clarity, vigor, or in particularly topical terms. It may present new insights, or show the subject in a new context, or in language or form particularly suited to the understanding of the *intended audience*. It is a disservice to users to select documents whose content is garbled or whose form places an unnecessary burden on the reader. Documents should be rejected if they:

- are poorly written;
- misuse the technical devices of their presentations;
- fail to provide sufficient information to judge or followup on the adequacy of their work, or
- offer conclusions which are not supported by data.

Thoroughness of reporting refers to the extent of necessary background information provided, level of technical detail presented, and substantiation given for statements made. The following questions might be asked by a selector:

- Is the premise or thesis or purpose stated clearly?
- Are stated goals met?
- Are the arguments developed logically and reasonably supported with facts and research, rather than opinion or conjecture?
- Are the procedures utilized described adequately enough to permit a later experimenter to duplicate them?
- Are data provided informatively as in tables, graphs, etc.?
- Are key bibliographic references included? Annotations?
- Are the data evaluated (rather than just presented) or is a future direction to evaluation of the data outlined?
- Is the text well written, and not ambiguous, unclear, or otherwise a bar to understanding?
- How does the document compare with others on the same topic? Individualistic or redundant and derivative?

- Does the document help to integrate the literature, e.g., by synthesizing the findings from various disciplines?
- Are addresses given for sources of materials cited?

5. Responsiveness to Current Priorities

Priorities are established by the governments and institutions responsible for the conduct of education. Priorities may be established at the national, regional, state, local, or professional level.

Documents dealing with priority issues should be given special consideration, especially those dealing with priorities, goals, and objectives established by the NIE. NIE priorities identify the urgent needs in American education and the areas most requiring beneficial change and innovation.

6. Timeliness

The document should be current in terms of the work being done in the area with which it is concerned. A large number of the candidates for RIE have a value that is in inverse proportion to their age. Every Clearinghouse should, therefore, process documents as quickly as possible and should discourage backlogs.

There is no age limitation for RIE candidates. However, because timely, up-to-date information is to be preferred, a high percentage of RIE accessions have been published within the five years immediately prior to announcement. Some older documents, considered as "classics" or "landmarks," may be considered for RIE; however, they would be the exception rather than the rule. The same would hold for documents whose significance is the part they form of the historical record, e.g., the official proceedings or recommendations of a board, commission, or major organization in the field.

7. Authority of Author, Source, Sponsor

Some authors and some organizations are established leaders in their fields and have so consistently contributed to the field that virtually anything they produce merits close attention. Selectors must, however, not fall into the trap of automatically and uncritically accepting everything from such sources.

8. Audience; Comprehensiveness

The broader and larger the audience for a topic, the more justification there is for selecting a document on that topic. Documents on extremely narrow and specialized topics with correspondingly small audiences must, conversely, be strong with respect to the other criteria to warrant selection. In other words, an otherwise marginal document may be selected on the basis of the large number of people known to be interested in its topic (high user demand) whereas a marginal document with a minuscule audience is in double jeopardy.

The large and varied RIE user group makes this a difficult criterion to apply. In addition, a stated ERIC objective is a comprehensive approach that leaves no topic totally unrepresented in the data base.

The selector must therefore strive to maintain a broad view, partial to no particular segment of the user group, and permitting the selection of documents potentially useful to any segment.

E. Legibility and Reproducibility

1. General

All Level 1 and 2 documents announced in RIE are converted into microfiche, which are disseminated to users on both a subscription and an on-demand basis. Level 1 documents are also made available to the public in paper (hard copy) reproduced from the microfiche. Documents with clean, crisp, unbroken type on a clear background make the best copies. All such reproduction work is performed by the ERIC Document Reproduction Service (EDRS) using the original documents collected by the Clearinghouses and forwarded to the ERIC Facility.

EDRS performs its work according to certain Government standards* and is contractually obligated to adhere to these standards in most situations. Any exceptions must be specifically granted by Central ERIC.

The section that follows is based on the more detailed text and examples in the *ERIC Document Reproducibility Guidelines* (November 1978), which should be consulted for all problems relating to reproducibility. The intent of this section is to describe the physical qualities that a document must have in order to be photographically reproduced onto microfiche and then paper copy. Since it is easier to state what can't be filmed rather than what can be filmed, the approach taken here provides criteria that will make a document illegible or non-reproducible. Documents falling into this class should be rejected. It is a disservice

**Basic U.S. Government Micrographic Standards and Specifications*, National Microfilm Association, January 1972.

to inform the users of a document that they may pay to obtain and then cannot read adequately. In all cases, the Clearinghouse should forward the best copy of the document available to it.

2. Physical Characteristics of Documents Which Present Reproduction Problems

a. Type Size

Type size below 6-point can generally not be reproduced satisfactorily; 6-point type is difficult to read for any length of time or amount of material, even in a good quality original. To start with smaller than 6-point, and to go further generations of reproduction, is to generally degrade the material to the extent that it is unsatisfactory to the user. Material already reduced in the original document is particularly prone to falling below 6-point size and must be carefully examined.

Extensive interviews of students were conducted by Commission staff from mid-1968 through early 1969 with the purpose of examining the attitudes and perceptions of students concerning the education they were receiving. Among the issues addressed by the students were the following: how the schools can respond con-

6-Point Type

b. Broken Type/Faint Type/Smudged Type

Broken type is the consistent dropping of portions of the characters, e.g., the left side, the descenders, the top, etc. Keying or printing equipment out of adjustment is what generally causes broken type. While the broken type original may sometimes be readable because of faint impressions or "suggestions" on the paper, these traces are generally lost in filming, and the resultant copy can be of marginal readability to the user.

Faint or weak type can be the result of various factors ranging from an old typewriter ribbon with little ink remaining, to a poor printing job. Faint type can often be tested by attempting to photocopy (e.g., Xerox) the original. If there is a firm enough image to derive a readable copy on an office photocopier, then the chances are the document can be filmed adequately. If the copy is too poor, however, the document should be considered not-reproducible.

Smudged type has either had the original character images spread or dispersed around themselves, thereby confusing their nature, or it is the victim of an overprinting of other characters.

c. Colored Papers or Inks

Colored paper or inks do not, of course, reproduce in their original color, and they do affect the quality of the black and white film image. Documents depending on color to transmit meaning (e.g., a document portraying colored spectrum lines, paint samples, textile swatches, different colored graph lines, anthropological skin color description standards, etc.) are better entered at Level 3, if possible, with the user referred to a source of availability of an original copy.

Documents printed via diazo and spirit duplicator techniques (e.g., Ozalid-blue-line process, Ditto, etc.), or in colored inks (e.g., blue, green, yellow, orange), will often not reproduce. The *ERIC Document Reproducibility Guidelines* should be referred to in order to determine which color combination will photograph adequately. Due to spectral color response differences, sometimes a color combination that will not photograph well can be adequately reproduced on an office copier. In such an instance, the copies should be substituted for the colored originals.

Black ink on an especially dark paper background (e.g., dark red, dark brown, dark green, dark blue, purple, etc.), or tone-on-tone printing, is frequently unsatisfactory. Many otherwise excellent documents make use of colored paper in whole or in part. If the paper is light colored and not dark (e.g., yellow, pink, light green, tan, etc.), the item can frequently be handled at Level 1. If the paper is medium dark, but there is still good contrast between the inked characters and the paper background, Level 2 may be necessary. If the document contains significant amounts of genuinely dark paper, Level 3 should be the choice.

Material that depends on gradations of shading, such as some types of bar graphs, will not generally reproduce so that the same differentiations can be made as in the original. Text which has been "highlighted" with colored inks or shading also reproduces poorly.

d. Translucent Paper

Documents printed on translucent paper, such as a thin onionskin, are not a problem unless there is print on both sides and both sides tend to "bleed" (i.e., to be seen simultaneously) and thereby interfere with each other.

e. Photographs

Photographs will not copy well unless screened at the time of filming. Photographs that are under-exposed or very stark or simple in their content will sometimes

reproduce reasonably well. Documents that depend largely or entirely on photographs to convey their message, if entered at all, are better entered at Level 3, with the user referred to a source of availability of an original copy.

If a document contains a significant number of photographs, and especially if the photographs are scattered throughout its length, rather than grouped in an Appendix, it is best to leave them in and note them in the Descriptive Note Field or in the Abstract, e.g., "Contains 25 early photographs (with detailed captions and sources) of American Indians, which will not reproduce well."

f. Handwritten Documents (Holographs)

Handwriting is more prevalent in educational documents than one might imagine. It rarely reproduces well because of the variability of the impression. In addition, most handwriting is highly idiosyncratic and takes on the properties of shorthand (i.e., characters are slurred, elided, or left out). Handwritten documents, or documents containing substantial handwritten material, should be avoided whenever possible.

g. Missing Pages/Pagination Problems

Every document selected for RIE must be checked not only to determine its correct pagination, but also to verify that there are not missing pages and that the pages that are there are in the proper sequence. Documents with pages out of sequence must be corrected before being transmitted to the Facility. Documents with missing pages should generally not be selected for RIE. An attempt should first be made to secure the missing pages and to insert them where they belong. Only if it can be demonstrated that the missing pages are not essential may the document be selected for RIE; in such cases, the missing pages must be noted in the Descriptive Note Field, and the document must be stamped "BEST COPY AVAILABLE."

h. Blank Pages

Completely blank pages contained in a document should not be filmed, even if they bear a page number in the original. The paginator's consecutive number stamp will provide one clue to the user that a page of the original was skipped deliberately. It would also be helpful (though not mandatory) if, in document preparation, a page following a blank page could be marked with the notice: "The previous numbered page in the original document is blank."

Occasionally a page will contain so little information (e.g., "Appendix A") that a document preparer is tempted to treat it as a blank page. This may be done, at the judgment of the document preparer, if the sparse information is repeated on the following page; however, as a general rule, it is best to convey to the user the entire original document, improving legibility where possible, and forewarning the user with appropriate cataloging notes, but *not* editing out entire pages.

i. Undersize Pages (Within Regular Size Documents)

Undersize pages, e.g.

- 3" x 5"
- 4" x 6"
- 6" x 9"

are not a filming problem as long as the text they contain is clear, legible, and no smaller than 6-point.

j. Oversize Pages (Within Regular Size Documents)

The ideal page size is 8½" x 11", standard letter size. Any page exceeding these dimensions is considered "oversize" and must be handled by one of four possible techniques:

- document preparation
(re-arranging, trimming, cutting and pasting, re-typing, etc., in order to create one or more regular size pages from the oversize original)
- increased reduction ratio (up to 29X)
(can be used to get legal size documents (8½" x 14" pages) into one frame. However, the entire document must be filmed at this ratio)
- double-framing
(wide pages, up to 17" x 11", can be filmed right-reading across two microfiche frames)
- overlapping images
(foldouts (or oversize documents) which exceed the limits that can be handled by the double-framing and increased reduction ratio, must be handled as a series of overlapping images; however, this technique is awkward for the user and reduces the utility of the document)

Detailed instructions concerning each of these techniques appears in the Manual in Section V. Oversize pages can be handled satisfactorily. Only the overlapping image technique creates some potential confusion to the user on the resultant microfiche.

3. Document Preparation (Remedial Actions to Physical Document Problems)

The mere presence in the document of one of the above undesirable physical characteristics is not sufficient to prevent selection. The physical problem must exist to an extent that materially affects the document. There are three possibilities:

a. The physical problem affects the document only slightly and need not be corrected.

In this case, the document may be selected for RIE. The problem may be noted in the Descriptive Note if desired, but this is not required except in the case of missing material. Examples of this type of problem might be:

- small type interspersed internally on a few pages or tables;
- a few photographs;
- a few pages with broken or otherwise poor type;
- a missing and unobtainable, but non-essential section or appendix (should be noted in the Descriptive Note).

b. The physical problem has a substantial effect on the document, but it can be corrected by the Clearinghouse itself.

In this case, the document should have the defect corrected if it is selected for RIE. (Major amounts of re-typing should be avoided, however.) Examples might be:

- illegible pages that can be re-typed;
- a graph dependent on color that can be re-labeled so as to be independent of color;
- material in excessively small type that can be re-typed, or even perhaps omitted, without detriment to the document;
- out-of-sequence material that can be re-sequenced.

c. The physical problem has a substantial effect on the document and requires going back to the source for remedial action.

In this case, the Clearinghouse should work with the source to correct the defect, if possible. Examples might be:

- extensive missing pages;
- extensive materials reduced below 6-point size;
- extensive illegible pages.

In some cases, sources have been willing to make available the original camera-ready copy in order to see that their document makes it into the ERIC system.

As a general rule, a document that has substantial physical defects should not be selected "as is" for RIE. Rare exceptions may occasionally be made in the case of unusually important and high quality documents that simply cannot be corrected, e.g.:

- the author is deceased;
- the source organization no longer exists;
- no other copies exist, etc.

Whatever the reason, if a physically defective document is selected for RIE, the document cover must be stamped "BEST COPY AVAILABLE" and should be entered at Level 2 (microfiche only). If the defect is serious, it should be noted in the Descriptive Note. If it is not appropriate to describe the defect specifically, the following general note should be placed in the Descriptive Note Field: "*Not available in paper copy due to marginal legibility of original document.*"

PRIORITY documents transmitted from the Facility have generally been screened in advance for legibility and reproducibility before being sent to the Clearinghouses. If such a document bears the stamp "BEST COPY AVAILABLE," the possible sources of better copies have been exhausted.

F. Availability

Documents announced in RIE must be available either through EDRS (Level 1 or 2) or through an outside source whose name and address can be cited in the Availability Field (Level 3). ERIC does not wish to announce documents that the user cannot obtain in some way. Therefore, if a document cannot be reproduced and a source of availability cannot be found, it should not be selected for RIE.

The degree to which a document is readily available from sources other than ERIC can also affect the selection decision. ERIC recognizes a certain responsibility for the bibliographic control of fugitive materials in the field of education. If a document would probably not be available anywhere if not included in the ERIC data base, then there are stronger reasons for selecting it than there would be if it were available through regular publishing channels.

Documents which are commonly and easily available on a nationwide basis should generally be evaluated by selectors very strictly. It is unlikely that the use of such documents by the educational community depends on ERIC. They will be in many library collections and will therefore be frequently cited and readily consultable by users quite apart from any announcement in RIE. Unpublished papers and those having only local or specialized distribution should, on the other hand, be

evaluated more leniently. ERIC may be the only data base that has acquired the document and the only one in a position to preserve the document for future users.

G. Factors to be Considered in Selecting Certain Types of Documents

The preceding criteria pertaining to quality, reproducibility, and availability, apply equally across all documents being considered. Beyond these common selection criteria, however, there are some "considerations" that apply only to specific types of documents.

In this section, eight types of documents have been isolated from the "Most Suitable" or "Acceptable" categories, and a discussion for each type is provided that takes into account the special characteristics of that type and how they might affect selection decisions.

1. Dissertations and Theses

Acquisition of doctoral dissertations and masters theses on a systematic basis is not expected of the Clearinghouses, but such items are acceptable when they meet special criteria.

The majority of domestic doctoral dissertations are controlled by and announced in University Microfilms' *Dissertation Abstracts*. It is possible, therefore, to be very selective about dissertations that are candidates for RIE. In addition to the normal selection criteria, the following situations may be justification for including a dissertation in RIE:

- The university granting the degree does not participate in *Dissertation Abstracts*, e.g., Walden University, University of Chicago, Massachusetts Institute of Technology. (In the front of each issue of *Dissertation Abstracts* is a list of currently participating institutions.)
- The dissertation is of special importance to the area of education covered by the Clearinghouse and by its high quality would definitely enhance the ERIC data base.

Particularly significant dissertations that are in (or going in) *Dissertation Abstracts*, and that are also selected for Level 3 announcement in RIE, should provide ordering information in the Availability Field.

Dissertations that are not in (and not going in) *Dissertation Abstracts*, and that are selected for RIE, should be entered at the level granted by the author. If a dissertation, which is selected for RIE, gives a source of availability, but the author cannot be reached for a release, then the document may be announced at Level 3.

Masters theses are controlled and announced, on a more limited basis, via University Microfilms' *Masters Abstracts*. Masters theses (and research papers from fifth-year programs) may on an exception

basis be entered in RIE at Level 1 or 2; they must, however, be entered at Level 3 when announced in *Masters Abstracts* and available from University Microfilms.

(An alternative way of announcing dissertations has been adopted by one Clearinghouse. The Clearinghouse prepares bibliographies of dissertations focused on specific topics. Each bibliography contains citations for approximately 18 to 24 dissertations announced in *Dissertation Abstracts* during six-month time periods (January-June and July-December), and, with the permission of University Microfilms, includes the full DA abstract and ordering information. The bibliography is then entered at Level 1.)

2. Brief Materials (5 pages or less)

Brief materials consist of those documents of five or fewer pages, with the text containing 1,500 words or less.

Short documents can create user problems, and their entry into RIE should be kept to a minimum. Users may object (and have in the past) to paying full microfiche or paper copy prices for short documents when the documents do not contain much meaningful information. For these reasons, short documents selected for the ERIC system must be scrutinized with greater than ordinary care. They must be documents of high quality.

Although the considerations listed below are similar to selection criteria mentioned elsewhere, they are very important to emphasize in the selection of short documents.

- Synthesis of high quality information presented in a concise matter;
- Timeliness, uniqueness, and scholarly significance;
- Utility for users;
- Loss to the education field if not included in ERIC.

The following types of documents, which are sometimes brief in length, are usually acceptable if they meet the selection criteria above:

- Speeches;
- Tests, questionnaires, or evaluation instruments;
- Numerical/quantitative data compilations;
- Descriptions of promising practices.

The following types of documents, if in brief form, are in general *not* acceptable:

- Bibliographies;
- Opinion Papers.

NOTE: Central ERIC requires that all documents 5 pages or less in length be reviewed by the Clearinghouse Director and, if selected, bear an indication on the log form to show that it has been reviewed and approved.

3. Corporation-Produced Materials

"Corporate Materials" refers here to classroom materials produced by industry (e.g., Kodak, McDonald's, Kellogg, General Motors, J.C. Penney, etc.), trade associations, and public utilities. Corporate materials are generally inexpensive or even free. Environment, energy, and nutrition are common topics. Most materials treat the company's area of business. For example, Kellogg publishes materials with food-related information; General Motors publishes materials about the automobile; the utility companies write about energy issues, etc.

Corporate materials can be useful classroom resources if they are appropriate and *not unduly biased*. The production of classroom materials by industry, trade associations, and public utilities causes some concern that companies may be taking advantage of students as a captive audience in the classroom. There is a common belief that schools should be free from commercial exploitation. Therefore, such documents need to be carefully scrutinized to see that they contain valid information for classroom use and not just advertising or propaganda.

The following considerations should be weighed in the selection of such materials:

- Validity

Avoidance of propaganda, of subtle biases toward the company or industry, and of telling just part of the truth when dealing with controversial issues.

- Accompanying Instructions

Provision of adequate information and instructions to facilitate use in the classroom or other educational setting.

- Generalizability

Generalizability of materials to other localities, states, and settings (for example, the materials should not be training materials designed specifically for one unique, small group or geographic setting, and not capable of replication.)

Selected materials should, as a rule, be put into ERIC at Level 1 or 2. Many corporate materials may consist of non-print media components such as posters, brochures, or films which are not appropriate to the ERIC system. If these components are essential to the meaning or usefulness of the materials, the materials should *not* be selected. Since the materials are generally designed to be eye-catching and attractive there may be special problems relating to reproducibility, such as color, size, etc. Corporate materials should meet all regular reproducibility guidelines.

4. Bibliographies

Bibliographies consist of lists of materials relating to a particular subject, author, or period. Bibliographies may cite books, films, and multimedia materials. They may or may not contain annotations or abstracts.

Bibliographies can be extremely useful to the user of ERIC when they are specific to a topic, contain sufficient information to enable a user to locate entries relevant to his/her needs, and provide complete bibliographic information.

The following list is intended to assist in the selection of bibliographies. Considerations under each of the major headings below are suggestive, not prescriptive, i.e., these are merely things to think about in the selection process as an item is compared to others like itself in order to judge the best quality materials:

- Purpose and Scope
 - Identification of purpose;
 - Indication of intent (exhaustive or selective, including basis of selection);
 - Statement of limitation (language, geographical boundaries, periods of time, or subject);
 - Creation of more than a mere list of titles.
- Organization and Arrangement
 - Inclusion of a Preface, Table of Contents, and Index;
 - Compilation in accordance with the stated purpose;
 - Explanation of special features;
 - Provision of clear, concise, and informative annotations or abstracts;
 - Usefulness, consistency, and suitability of the arrangement (alphabetical, classified, chronological, geographical, or a combination of one or more methods).

- Completeness of Bibliographic Information
 - Inclusion of complete bibliographic citations, including author, title, place, publisher, date, and pagination.
 - Accessibility, availability, and currency of the material;
 - Indication of grade level for which prepared, if appropriate.
 - Authority of the Compiler
 - Professional bibliographer or subject specialist.
 - Comprehensiveness/Length
 - Presentation of enough citations to make the document meaningful and useful.
- (NOTE: Short, informal, on-demand bibliographies, such as computer printouts of ERIC searches are *not* suitable for input to RIE and should be rejected.)

5. Level 3 Documents (Documents That Cannot Be Reproduced)

Level 1 documents are available from EDRS in both paper copy and microfiche. Level 2 documents are available in microfiche only. Level 3 documents are not available from EDRS, but *are* available from an external source (cited in the Availability Field).

Although every effort should be made to obtain reproduction releases, there remain some documents for which releases cannot be obtained. Commercial publishers and other organizations (such as UNESCO and the Council of Europe) may sometimes refuse to let ERIC reproduce their documents. In addition, some documents may not reproduce adequately in either microfiche or paper copy because of charts, photographs, colored pages and inks, or other physical characteristics.

Documents that cannot be microfiched and made available via EDRS have always been allowed into the ERIC system, but always at a low percentage rate. The reason for this restriction is that Level 3 documents can frustrate the user who is accustomed to finding RIE announcements in the ERIC microfiche collection. In addition, orders are often placed by librarians with EDRS without checking Level status; orders for Level 3's are, of course, returned unfilled. As a result, Level 3 documents are permitted

by ERIC sparingly (if they have a reliable source of availability that can be cited), but are not encouraged. Clearinghouses vary in their Level 3 input, but the overall system percentage is approximately 5% annually.

Because the volume of Level 3 documents is restricted, they must be subjected to more stringent selection criteria than regular documents. The following considerations might apply:

- Contains new information, or information that can fill a known gap in the data base;
- Provides detailed information on a subject not previously treated in depth, or provides a synthesis/overview of a topic in which the literature was previously scattered;
- Provides timely and current information, or information for which there is an active current demand;
- Provides exceptional, exemplary information of a level significantly higher in quality than other input;
- Provides information of special importance in the field or of historical significance ("landmark" documents);
- Prepared or published by an authoritative source and, therefore, is apt to receive significant attention and user interest.

In general, documents that are available only from sources outside the United States should not be considered for Level 3. Exceptions may be made for highly significant documents available from sources of known reliability (e.g., UNESCO). (See Section II.E.9 for the stringent selection criteria to be used for such documents.)

The following kinds of documents will occasionally require Level 3 processing:

- Books;
- Collected Works;
- Dissertations;
- Creative Works;
- Historical Materials;
- Non-Print Media;
- Reference Materials;
- Directories;
- Maps;
- Commercial Guides.

In citing the external source of availability it is necessary to include the full address and advisable to include the price, for the convenience of the user. If there is any question of availability,

the source should be checked. Documents soon to go out of print, or for which stocks are depleted or don't exist, should not be selected.

6. Documents Containing Material of Local/Parochial Interest

"Local" refers here to a limited geographic area. "Parochial" refers here to a narrow subject matter and correspondingly limited audience.

Documents containing substantial amounts of information of a local or parochial nature may come from any source, but are often produced by state and local education agencies.

Although ERIC serves many specialized audiences, most ERIC documents should be of interest to a fairly broad audience. Documents containing a substantial amount of local and parochial content are generally *not* desirable candidates for RIE and should be selected *only* if they also have some significance and utilization beyond the narrower confines, or are generalizable to other content areas.

Documents which occasionally fall into the local/parochial category are:

- Surveys;
- Historical Materials;
- Legal Materials;
- Directories of Local Services;
- Holdings Lists of Local Libraries.

Bibliographies may also verge on this category by focusing on local references, often difficult if not impossible to obtain outside the local area.

The following considerations should be kept in mind when evaluating documents containing local/parochial material:

- Usefulness at a Broader Level

For example, the document could provide a model useful to educators in other districts developing similar programs. It could report a survey done at the local/state level, but generalizable to other areas. If a document is only about local issues, it should not be selected, but if the local issues are related to broader national issues, or if other locales are facing similar issues, it may be selected.

- Coverage of a Unique Subject Not Available in Other ERIC Documents

For example, a document could offer historical information or survey information about an area which teachers elsewhere may use as resource material.

- Includes Information That Can Serve as a Base to Answer Common Requests

For example, many teachers are interested in finding curriculum guides for the particular area/state in which they teach, or guides from other areas that they can adapt.

7. Instructional Materials (For Student or Teacher)

Designed for practical use by either student or teacher, these materials often have a component which includes instructions and/or activities. Materials falling into this category are:

- Curriculum Guides;
- Teacher Guides and Resources;
- Student Guides and Resources;
- Classroom Materials;
- Lesson Plans;
- Units of Study;
- Instructional Packages.

Teacher guides and resources include materials which can be used by the teacher for obtaining background knowledge, factual knowledge, awareness-raising, or "how-to" information. They often provide conceptual frameworks for teaching and specific strategies and activities for classroom use. Student resources are materials that students can use essentially without direction or intervention by the teacher.

Many of ERIC's users are practitioners who request materials to help them in their teaching. A major aim of the ERIC system is to provide a data base that includes sound student and teacher guides and resources.

The following list of factors is intended to assist in selection of student and teacher materials. The list is suggestive, not prescriptive. Good materials will encompass many of the factors; average materials will encompass a few; poor materials will exhibit none. An appraisal of these factors can contribute to making a better decision about whether to include the materials. As always selectors must use a holistic approach to document selection, attending both the ERIC guidelines and their own experience and expertise within their Clearinghouse scope.

It is extremely important that instructional materials be examined to avoid duplication of their information content. One state may publish an instructional manual consisting primarily of content derived from another state. It is, therefore, essential that the selector be a senior staff person who is knowledgeable about the scope of the Clearinghouse and the content of the existing data base.

- Organization
 - Ease of use;
 - Presence of a Table of Contents, Preface, Glossary, Index.
- Educational Objectives
 - Clarity of instructional goals, including both affective and cognitive objectives, whenever appropriate.
- Content
 - Accurate and valid presentation of information;
 - Complete information included without major omissions;
 - Inclusion of sound and substantive information;
 - Logical development of ideas;
 - Up-to-date illustrations.
- Teaching Strategies
 - Appropriate for target group;
 - Clarity of methodology;
 - Explicit identification of concepts;
 - Reflection of a variety of teaching/learning modes.
- Activities
 - Logical relationship between basic objectives and activities;
 - Appropriateness and relevance of a variety of activities to pupils' experiences, interests, levels of comprehension, and grade level.

- Stereotyping, Bias, and Social Inequity
(selection should be sensitive to extremes)
 - Whenever possible, avoidance of statements of bias and stereotyping concerning women and ethnic groups;
 - Avoidance of references to the historical and/or current disadvantages of various groups;
 - Promotion of mutual understanding and respect between races and ethnic groups;
 - Fair treatment of people as individuals.
- Suitability of Materials for Learners
 - Relationship of content to pupils' experiences, interest levels, levels of comprehension, age and maturation level;
 - Suitability of vocabulary, sentence and paragraph structure, and concept level to the age group which will use the materials.
- Completeness of Bibliographic References
 - Usefulness of information included in the bibliographic citations so that the user can obtain resource materials;
 - Indication of grade level, if needed.
- Completeness
 - Self-contained materials.
- Duplication of Materials Already in the ERIC Data Base
 - Uniqueness relative to other materials already in ERIC, i.e., inclusion of new techniques or information on a needed or unique topic.

8. Research Reports

Good defines research as "...disciplined inquiry, varying in technique and method according to the nature and conditions of the problem identified, directed toward the clarification or resolution (or both) of a problem."

Webster defines research as "...investigation or experimentation aimed at the discovery and interpretation of acts, revisions of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws."

Reprinted below are the characteristics of a good research report as conceived by the National Council of Teachers of Mathematics (*Criteria for Judging Research Reports and Proposals* - ED 138 469). Consideration of these factors may facilitate the selection of high quality research reports.

a. The Problem

- (1) The problem is clearly stated, and the rationale is logical.
 - (a) The purpose is concisely stated.
 - (b) Objectives are specified.
 - (c) Procedures are specified.
 - (d) Variables are identified, and their relationship to theory or observation is explained (if the variables are new, then evidence from a pilot study is presented).
 - (e) Research hypotheses are concise.
 - (f) Research hypotheses are logically developed from some theory or related problem, and they are clearly plausible.
- (2) The problem is significant.
 - (a) Its relationship to previous research has been well established.
 - (b) The hypothesized research findings should be generalized beyond the sample.
 - (c) The study will make a contribution to the advancement of knowledge.
 - (d) The results will contribute to the solution of some practical or theoretical problem.

b. Design and Procedures

- (1) The design of the study is appropriate to the solution of the problem.
 - (a) The research design is fully developed.
 - (b) Assumptions are clearly stated.
 - (c) Delimitations are noted.
 - (d) The population and sample are described: geographic limits; time period covered; sociological description; sampling units.

- (e) The sampling method is appropriate and practical.
 - (f) Controls for sources of error are described and are appropriate: sampling error; nonresponse; interviewer bias; response error; response set; experimentor bias; teacher effect; control of variables; extraneous factors.
- (2) The relationship of the procedures to the implementation of the design is appropriate.
- (a) The data-gathering methods are clearly described and meet the requirements of the problem.
 - (b) The obtained sample is of a sufficient size and is representative of the defined population.
 - (c) The measuring instruments are appropriate.
 - (d) The validity and reliability of the evidence are established, or a procedure for establishing the validity and reliability of the evidence is described.

c. Analysis and Conclusions

- (1) The analysis of the data is appropriate.
- (a) The results of the analysis are clearly represented.
 - (b) The analysis methods are valid, appropriate, and properly applied.
 - (c) The assumptions behind the statistical tests are stated, and the relationship of the test to the design is appropriate.
- (2) The conclusions are reasonable.
- (a) The conclusions are clearly stated.
 - (b) The conclusions are substantiated by the evidence presented.
 - (c) Interpretations and implications are impartial and scientific.
 - (d) A comprehensive discussion of the qualifications is given (methodological problems and errors, alternative explanations, other limitations).

- (3) The research is adequately reported.
 - (a) The report is logically organized and clearly written.
 - (b) Grammar and mechanics are adequate.

H. CIJE Selection

1. Introduction

The *Current Index to Journals in Education* (CIJE) is a monthly index journal designed to announce and disseminate education-related information contained in the current periodical literature. CIJE is a companion journal to *Resources in Education* (RIE); between them they cover a large percentage of the total literature of the field. Approximately 780 journals are covered regularly by the ERIC Clearinghouses and are listed monthly in the "Source Journal Index" (appearing in each issue of CIJE). Journal articles processed by the ERIC system are processed for announcement in CIJE. The few exceptions (e.g., older articles more than two years old and no longer eligible for CIJE) are discussed in Section III.C.1.

2. Selection of Journals

The selection process for CIJE exercises its quality control primarily at the journal level. High quality education journals are pre-selected to be covered totally or comprehensively. All others are pre-selected to be covered selectively (but comprehensively for their education content). In general, therefore, the application of qualitative criteria is not as relevant in selecting individual journal articles for announcement in CIJE as it is in selecting individual documents for RIE. This is because CIJE was designed to cover *all* education-related articles in the journals that it formally states it will cover. It is useful to educators, and essential for librarians among others, to know and to be able to count on, for example, the fact that *all* articles appearing in a journal such as the *Harvard Educational Review* and *all* education-related articles appearing in important periodicals such as *Science*, will, without exception, be announced in CIJE.

Journals from which articles are derived for announcement in CIJE can be thought of as of three types:

- Education Journals

Journals totally concerned with the field of education.
Example: *Journal of Educational Research*.

- Education-Related Journals

Journals that regularly and frequently contain articles bearing on education, but whose main focus is elsewhere:
Example: *Journal of Applied Psychology*.

- Non-Education Journals

Journals that occasionally, but infrequently, contain an education-related article.

Example: *Science*.

3. Selection of Articles Within Journals

The selection of individual articles within formally covered journals on the "Source Journal Index" is guided by the following rules:

- Coverage of designated education journals must be "cover-to-cover." This is defined as comprehensive and complete article coverage, normally excluding, however, such items as book reviews, editorials, letters to the editor, newsletters, feature columns, schedules of events, advertising, articles of one page or less, etc.
- Articles in education-related journals are selected for inclusion in CIJE strictly on the basis of their relationship to the field of education. Articles not related to education are excluded, as are the miscellaneous types of material referred to above.

In addition to its regular journal article workload, derived from journals formally covered by CIJE, it is permissible for a Clearinghouse to input *any* good quality education-related article that may be detected in some other journal not regularly covered, e.g., the *New Yorker*. These are called colloquially, "oneshot" articles. It is not necessary to receive prior approval for "oneshots," but they should be identified as such by writing "oneshot" on both the top of the resume form and in the Comments block on the log sheet. It should be remembered, however, that the journal involved will *not* be listed in CIJE among those formally covered. In order to provide the user with means to obtain a copy of the article, if desired, it is necessary that the address of any small, obscure, or otherwise difficult to identify journal, be cited in the cataloging. This "oneshot" category is intended to be used on the *exception basis* (i.e., no more than one or two per month), for the occasional important article from a non-education journal. It is not intended as a preliminary step toward inclusion of the journal on the regular journal list; however, any journal that is repeatedly a source of "oneshot" articles, should be considered for possible regular formal coverage.

4. Procedures for Recommending New Journals to be Considered as Candidates for CIJE

Clearinghouses nominate appropriate journals for inclusion in the "Source Journal Index". New journals should be nominated by the Clearinghouse responsible for the subject area concerned for either cover-to-cover or selective processing. Central ERIC

approves or disapproves these nominations along with the CIJE Contractor on the basis of the overall size of the list.

If non-Clearinghouse components (e.g., Central ERIC, EDRS, ERIC Facility, Oryx Press) learn of new candidate journals, they should transmit the information to the appropriate Clearinghouse. If the original recipient cannot determine the appropriate Clearinghouse, the materials should be sent to the ERIC Facility's Acquisitions Department for this decision.

Given the large number of journals covered by CIJE, Clearinghouses should generally attempt to delete a marginal journal (e.g., less valuable content or irregular publication schedule) in order to add a significant new journal. The responsibility for making this decision belongs to the individual Clearinghouse. If, however, it becomes necessary in the opinion of the Clearinghouse to add one or more journals and not to delete any, justification should be submitted to Central ERIC which, in consultation with the CIJE Contractor, will make a decision in this matter.

5. Journal Article Legibility and Availability

Journal articles are not handled by the ERIC Document Reproduction Service (EDRS) and are therefore not reproduced by EDRS for users in either microfiche or paper copy. The articles announced in CIJE are available through the original journals themselves and through reprint services such as UMI and ISI. For these reasons, questions of legibility, color, page size, type point size, and reproducibility do not enter into either the selection process or the later cataloging process and need not be considered by the Clearinghouses.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 4: HANDLING AND SHIPPING

January 1981

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION IV: HANDLING AND SHIPPING

HANDLING AND SHIPPING

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HANDLING AND SHIPPING

SUMMARY OF SIGNIFICANT RULES

1. There are two classes of document handling: ROUTINE and PRIORITY. Documents assigned to the latter class must, if selected, be processed in time to be included in the next issue of RIE that has not yet been closed. (PRIORITY documents will usually be selected for RIE for the same reasons they were assigned PRIORITY handling. However, this decision rests with the Clearinghouse unless special instructions accompany the document.)
2. Clearinghouses must send to the Facility, on the last working day of every month, basic title records for all documents selected during that month, for use in compiling the monthly duplicate-checking tool, the *Acquisitions Data Report* (ADR).
3. The basic responsibility for duplicate checking resides with the Clearinghouses. The Facility makes a final check, just prior to publication, on all items received from Clearinghouses.
4. All NIE/ED-sponsored reports must be cleared by NIE/ED Project officers before being processed. Documents received from the ERIC Facility can be assumed to be cleared. Clearances for documents received directly from sources other than the Facility should be sought via the ERIC Facility.
5. Clearinghouses are responsible for obtaining reproduction releases from copyright or proprietary rights holders and for maintaining a permanent file of all releases obtained. Documents for which releases have been obtained must reflect this via Reproduction Release Labels affixed to their covers.
6. A Clearinghouse that acquires a document that falls within the scope of another Clearinghouse should forward the document to the relevant Clearinghouse promptly and directly.
7. A Clearinghouse that is assigned a document that overlaps the interests of other Clearinghouses must be certain to index the document from the viewpoints of the other Clearinghouses as well as its own. These other Clearinghouses are indicated on the "Scope Overlap Label," affixed by the ERIC Facility.
8. All documents forwarded for inclusion in RIE must bear an NIE Policy Disclaimer Label stating that the document does not necessarily reflect official NIE policy.

9. Reply Cards (Acknowledgments to Contributors) are optional, and each Clearinghouse may pursue its own preferred course. However, care should be taken not to automatically send such routine "thank you" notes to inappropriate sources, e.g., a State Governor's office. Self-addressed reply cards affixed to documents by source institutions (or by the ERIC Facility for the source) should be detached and forwarded only if the document is rejected; they should be left affixed throughout processing, if the document is selected, as the Facility will later record on them the ED number before returning them to the source.
10. A completed "Clearinghouse Accession Log Sheet" must accompany each shipment of documents from Clearinghouses to the Facility.
11. All packing, wrapping, labeling, and addressing must conform to regulations and limitations recommended or imposed by the Postal Service.
12. ERIC materials shipped from Clearinghouses to the Facility via the Postal Service should be sent Certified Mail, unless otherwise directed. Commercial delivery companies may be used if an equivalent service is available.
13. Shipments of ERIC materials from Clearinghouses to the Facility should conform to the "ERIC Master Schedule" published at the beginning of each calendar year.
14. Clearinghouses should, in general, avoid requesting that documents submitted for announcement in RIE and filming by EDRS be returned. Filming requires that the document be taken apart. Documents must be retained in their original copy at EDRS for a period of four (4) months in order to be able to respond to possible re-filming needs. Under the circumstances, the return of a document represents a significant amount of extra work for EDRS.

IV. HANDLING AND SHIPPING

A. Introduction

This section describes the procedures for handling and shipping documents intended for RIE and journals intended for CIJE. After documents have been acquired, certain forms must be used and certain operations are necessary in order to make the documents ready to proceed through the subsequent phases of processing (selection, cataloging, indexing, abstracting). After processing has been completed, certain guidelines must be followed in wrapping, packing, labeling, and shipping documents from one point to another.

B. Facility Handling

1. Receiving Candidates for RIE

Approximately 7,000 documents are received annually at the Facility, either by mail or messenger, solicited and unsolicited, as candidates for RIE. These documents are delivered to the Acquisitions Department by the Document Control Department where they are processed and assigned to appropriate Clearinghouses for evaluation. Packages are opened and wrappings discarded unless they contain some useful identifying information not found elsewhere, e.g., sender's name and address. The following activities that take place in the handling of these documents are of interest to the network at large:

a. Check of On-Order File

All documents received are first checked against the "On-Order File" to see if they have previously been the subject of a specific request. (Since documents arrive from a variety of sources, it is possible, but rare, for a received document to be found to be on-order, but not to be arriving as a result of the order.) The on-order file is purged as orders are fulfilled; the file at any one time, therefore, represents specific document requests outstanding.

b. Establishing Title Control of In-Process Documents

Title cards (see Figure IV-1) are prepared for all documents received at the Facility. The titles are transcribed exactly as they appear on the document. Personal and corporate authors, report numbers, publication date, sponsoring agencies, series notes, and other identifying data are recorded, if provided. Each card also records the date the item was received, the copies received, and the disposition. The Title File serves as a record of all material received by the Facility. It is used to answer the questions of contributors, Clearinghouses, and Central ERIC. It is a record of all documents that have passed through the Facility on their way to the Clearinghouses. When

a document has finally completed all processing and has received an ED accession number, it ceases to be "in-process." Records in this file are retained for a two-year period and then removed.

<u>Title:</u>	(ID Number)
<u>Source:</u>	(Sponsor)
<u>Author:</u>	(Copies)
	(Date Rec'd)
	(CH Assgmt)

EFF - 40

FIGURE IV-1: TITLE FILE CARD
(Same card used for both On-Order and In-Process Control)

c. Duplicate Checking

The basic responsibility for ensuring that documents already in the ERIC system are not processed again lies with the Clearinghouses. The earlier it can be determined that a document is a duplicate, the greater the saving in time, money, and processing effort.

The Facility duplicate checks older documents received at the Facility in the *Title Index*, *Acquisitions Data Report*, and *Facility Title Card File*. The only check of current documents occurs when the Title Card is filed. If a card is in the file indicating previous receipt of the document, the document is either discarded or sent to the Clearinghouse as a "2d copy" or "Duplicate." If not previously selected, significant documents are occasionally resubmitted, sometimes to another Clearinghouse with the Scope Overlap sticker sent to the original assignee.

The decentralized nature of the ERIC system and its acquisitions efforts results in the Clearinghouses receiving, from various sources other than the Facility, documents that are either already in the system or in-process at their own or other Clearinghouses. Consequently, the Clearinghouses must check their own internal records, the *Acquisitions Data Report*, the *Title Index*, and RIE, in an attempt to avoid duplicate processing.

Clearinghouses receiving NIE or OE reports directly from sources other than the Facility are advised (see Section IV.C.1.d) to notify the Facility in order to obtain clearance. When this occurs, a Title Card is filed in the Facility Title Card File, thereby preventing possible later assignment of this same document to a different Clearinghouse.

d. Information of Use to Document Processors

Some documents acquired by the Facility are accompanied by information (such as copies of letters granting permission to reproduce or providing authorship, ordering, or price information), which is essential for complete and accurate document description. Sometimes information such as address or author affiliation is contained on the outside wrappers and nowhere else. All such information is attached when forwarding documents to Clearinghouses.

In general, the Facility sends along any information which might help the Clearinghouses identify, catalog, or otherwise process a document.

e. Assignment to Clearinghouses (and Use of Scope Overlap Sticker)

Documents received by the Facility are assigned, on the basis of their subject matter, to the appropriate ERIC Clearinghouses for selection and processing (cataloging, indexing, abstracting). The *ERIC Clearinghouse Scope of Interest Guide* (Appendix A) is the authority used during assignment. The problems met with during assignment vary from the simple to the complex. Documents dealing with single unified topics such as "Teaching English to Sixth Graders" can be assigned quickly, correctly, and with certainty; documents dealing with multidisciplinary topics (or mixes of target populations and topics), such as "Structural Variables Affecting CAI Performance on Arithmetic Word Problems of Disadvantaged and Deaf Students," can overlap the scopes of several Clearinghouses. It may be necessary to scan the Tables of Contents, Introduction, Conclusion, and even the body of such documents, to determine their major thrust.

In general, the minimum time consistent with reasonable and logical assignments should be spent on this activity. If a document overlaps the scopes of two or more Clearinghouses, a Scope Overlap Label (Figure IV-2) is affixed to the cover. A reproduced copy of the cover bearing such a sticker is then sent to each of the alternative Clearinghouses; this action serves to alert such Clearinghouses to the fact that a document of interest to them has been assigned to another Clearinghouse. If they wish to question the assignment, they can contact directly the "prime" Clearinghouse that received the document and negotiate as to which Clearinghouse should process the document. The label also serves to alert the Clearinghouse that got the document of the need to take account, during the indexing process, of the viewpoints of the alternative Clearinghouses. This can

be done by consulting the lists of "Most Frequently Used Index Terms" provided in the *Scope of Interest Guide* (Appendix A) for each Clearinghouse.

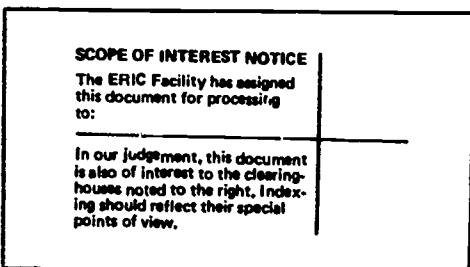


FIGURE IV-2: SCOPE OVERLAP LABEL

Note that Clearinghouse assignment, and the number of copies received, are recorded on the Title File Card (Figure IV-1); if duplicate copies of the document are received later, they can be directed, if needed, to the same Clearinghouse.

f. Special Instructions, Guidelines, etc.

From time to time, special instructions are forwarded from the Facility to Clearinghouses along with documents which require special handling. For example, when the National Diffusion Network (NDN) reports were being solicited, special guidelines were distributed to the Clearinghouses containing instructions on indexing (Figure IV-3). Similarly, when Research and Development Utilization (RDU) Program Materials were distributed, instructions were given to those Clearinghouses assigned the materials (Figure IV-4).

g. PRIORITY Document Handling

There are two classes of ERIC handling priorities: (1) ROUTINE; (2) PRIORITY. Certain reports are designated by Central ERIC for rapid or PRIORITY Handling; these are identified by a special PRIORITY Handling Form (Figure IV-5). All other reports are considered ROUTINE and carry no special identification.

The PRIORITY Handling Form is generally affixed by the ERIC Facility just prior to transmittal to the Clearinghouse. PRIORITY documents are handled before ROUTINE documents at all stages by the Facility and are sent separately by the fastest means to the Clearinghouses for processing.

The Clearinghouses must evaluate PRIORITY documents in time to process them, if selected, for the next issue of RIE still open to accessions. This issue is marked on the PRIORITY Form itself, but can also be determined from the ERIC Master Schedule. In some cases, when the RIE issue deadline is very close, PRIORITY documents must be handled within 24 hours of receipt. (In the case of some special projects, an RIE issue other than the very



PROCESSING AND REFERENCE FACILITY

4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723

OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION by ORI, Inc., Information Systems Division

GUIDELINES FOR PROCESSING

NATIONAL DIFFUSION NETWORK (NDN) MATERIALS

The NDN-ERIC Linkage Committee, designed to bring NDN and ERIC closer together, was established at the June 1977 Dissemination Forum. It has been working since that time to establish, among other things, guidelines for acquiring and processing NDN materials into the ERIC data base.

In order to ensure that NDN materials will be adequately retrievable, both as a group and individually, the following cataloging procedures have been agreed upon between ERIC and NDN:

1. "NATIONAL DIFFUSION NETWORK" should be used as an Identifier (preferably major) to index documents about NDN.
2. "NATIONAL DIFFUSION NETWORK PROGRAMS" should be used as a minor Identifier, to index documents generated by programs or projects with NDN sponsorship.
3. NDN project names, e.g., "PROJECT ADVENTURE," should be used as Identifiers (preferably major) to index documents dealing with these specific NDN projects.
4. The name/address of the developer/demonstrator to be contacted for further information should not appear in the citation as this is extremely transient information. It is unlikely that a decision to seek additional information about a program would be made solely on the basis of a citation/abstract. Contact point information will normally appear somewhere in the document and hence on the microfiche. This fact can be pointed out in the abstract, e.g., "*The availability of additional information on this program is discussed in Appendix A.*" or "*Briefings on the program are available from the developer (see p.54).*"
5. All NDN projects are validated by JDRP. It is useful, however, to be able to retrieve all documents describing validated programs, whether NDN-sponsored or not. It is proposed, therefore, that the Descriptor "VALIDATED PROGRAMS" be used (as a minor term) to tag such documents.

FIGURE IV-3: GUIDELINES FOR PROCESSING NDN MATERIALS
(Page 1 of 2)

Materials that simply are validated programs must be distinguishable during retrieval, however, from materials dealing with the actual subject matter of validation. For the latter, the Descriptor "PROGRAM VALIDATION" should be used.

Ideally, ERIC should eventually include a data element dealing with validation, e.g., validated or not, by which body, date of validation, etc. Such a data element is being considered in connection with the new educational practices file now under study. Until that time, however, this indexing approach will provide a means of retrieving validated programs.

6. All NDN documents are to be submitted to the ERIC Facility and then distributed to the Clearinghouses by the Facility. Each NDN document sent to ERIC will be accompanied by a special self-addressed Reply Card. As soon as a decision about acceptance or rejection of the document has been made by the Clearinghouse, the Reply Card will be completed, detached, and returned to the submitter of the document.

In addition to the above, a summary description of the NDN is being prepared to be used as a front matter insert for all related documents. As a reference and in locating NDN materials, a comprehensive listing of all NDN documents currently in the ERIC data base is being prepared by the Educational Resources Center, New Haven, Connecticut. This bibliography will be available in ERIC.

At the National Diffusion Network meeting on August 17, held in conjunction with the National Dissemination Forum, a packet of materials relating to processing of documents for ERIC was distributed to all attendees. The enclosed documents represent the beginning of NDN input into the ERIC data base under these new guidelines. Since it is intended that the submission of NDN documents to ERIC will be accomplished via the ERIC Facility, if you have any questions covering these procedures, please call the Facility Acquisitions Librarian, Mrs. Grace Sundstrom.

FIGURE IV-3: GUIDELINES FOR PROCESSING NDN MATERIALS
(Page 2 of 2)

ERIC FACILITY

January 25, 1980

Guidelines for Processing

Research and Development Utilization (RDU) Program Materials

GENERAL

For three years, under National Institute of Education sponsorship, seven projects in eighteen states worked to help over 200 schools identify and use R&D-based resources to improve their programs in the areas of basic skills, career education, and inservice education. In the course of this work, the projects---known collectively as the Research and Development Utilization (RDU) Program---developed resource materials and strategies for program improvement that should be of use to schools and persons who serve schools, whether they are based in state departments of education, in regional laboratories, in intermediate units, in teacher centers, or in school districts. These materials are embodied in 60 separate documents that are now being individually entered into the ERIC system.

ROLE OF THE NETWORK, INC.

THE NETWORK, INC., has prepared an annotated catalog (see letter and title page attached) of the RDU materials. This catalog will be put in ERIC as soon as ED numbers can be assigned to each document described therein.

CATALOGING/INDEXING

- The sponsor for all RDU materials should be cited as: "National Inst. of Education (DHEW), Washington, D.C. Dissemination and Resources Group." (BBB10279)
- Two Identifiers are highly recommended in order to tie these materials together:

*RESEARCH AND DEVELOPMENT UTILIZATION PROGRAM

LINKING AGENTS ①

FIGURE IV-4: GUIDELINES FOR PROCESSING RDU MATERIALS

① Changed to a Descriptor after this guideline was issued

ERIC REPLY CARD	
DOCUMENT TITLE: _____	
DISPOSITION OF DOCUMENT:	
<input type="checkbox"/> Selected for the _____ issue of RIE and <input type="checkbox"/> is assigned document no. _____ <input type="checkbox"/> Not selected for RIE.	
CLEARINGHOUSE NAME: _____	
Date: _____	
HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD? (EFF-28 (7-79))	

FIGURE IV-6(A): ERIC REPLY CARD

ERIC REPLY CARD	
NDN Document Submission	
Project Name: _____	
Document Title: _____	
Please check one: Reproduction Release enclosed <input type="checkbox"/> ERIC has Blanket Reproduction Release on file <input type="checkbox"/>	
Date submitted to ERIC: _____	
ERIC Disposition of Document	
<input type="checkbox"/> Selected for RIE. Resume will appear in RIE in about 3 months. Copies cannot be ordered from EDRS before announcement in RIE. <input type="checkbox"/> Not selected for RIE.	
Clearinghouse Name: _____	
Date reported to submitter: _____	
HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD? THANK YOU FOR SUBMITTING YOUR DOCUMENT TO ERIC	
EFF-28 (10/78)	

FIGURE IV-6(B): ERIC REPLY CARD (NDN DOCUMENTS)

REPLY CARD Submitting State Education Agency	
Document Title: _____	
Clearinghouse Temporary Accession #: _____	
<u>SEA</u> Check One: <input type="checkbox"/> Reproduction Release Enclosed <input type="checkbox"/> ERIC has Blanket Reproduction Release on File	
<u>Check One:</u> If not selected: <input type="checkbox"/> Return <input type="checkbox"/> Do Not Return <i>(Please do not ask for return unless absolutely necessary.)</i>	
ERIC Disposition of Document	
<input type="checkbox"/> Selected for RIE. Resume will appear in RIE in about 4 months. Copies cannot be ordered from EDRS before announcement in RIE. <input type="checkbox"/> Not selected for RIE.	
COMMENTS: _____	
Clearinghouse Name: _____ Date: _____	
HAVE YOU ENTERED YOUR CORRECT RETURN ADDRESS ON THE FRONT OF THIS CARD? EFF-28 (5/79)	

FIGURE IV-6(C): ERIC REPLY CARD (SEA DOCUMENTS)

If a Clearinghouse rejects such a document the decision should be so indicated in the appropriate place on the card. (Supplying a reason for non-selection is optional and at the discretion of the Clearinghouse.) The card should then be removed from the document by the Clearinghouse and mailed to the contributor.

If a Clearinghouse selects such a document for RIE announcement, the card should simply be left attached to the document when it is returned to the Facility. The Facility will then eventually enter on the card the ED number assigned to the document and mail the card to the contributor.

Clearinghouses may originate such cards if they wish, or they may choose to notify their own contributors by form letter or other means after the relevant issue of RIE has been published. Clearinghouse systems for thanking or otherwise notifying document contributors are entirely optional and should not be regarded as either replacing or being replaced by the Facility Reply Card system described here.

j. NIE Document Selection Report

Any NIE or NIE-funded document assigned to a Clearinghouse and not selected for RIE for any reason must be returned to the Facility together with a report citing the reasons for rejection. The "NIE Document Selection Report" form (Figure IV-7) is to be used to provide this report. The rejected document is sent by the Facility to the NIE Library for archival retention.

2. Handling of Documents Shipped to the Facility by Clearinghouses for Inclusion in RIE

Every week, by mail or commercial carrier, the Document Control Department receives shipments from the Clearinghouses of documents for inclusion in RIE. The following steps in handling take place.

a. Shipment Verification

Each shipment of documents from Clearinghouses to the Facility is received in the Document Control Department and the contents are verified against the Log Sheet (Figure IV-8) enclosed in the packages by the Clearinghouse. Any discrepancy is resolved by telephone with the Clearinghouse involved. Records are maintained of document input for each weekly shipment for RIE. A notation is made when a Clearinghouse abstains. If a Clearinghouse abstains for two weeks running, a check is made by the Document Control Clerk to determine the reason. PRIORITY documents are taken immediately to the Editorial Department for processing.

b. Pagination

After receipt and verification, the documents are paginated. The Paginator hand stamps every page according to the instructions given in Section V: "Cataloging." After pagination, documents are returned to the Editorial Department where the editorial function takes place.

NIE DOCUMENT

SELECTION REPORT

FROM : _____ / _____
(Clearinghouse) (Individual)

TO : ERIC Facility Acquisitions Department

SUBJECT : Return of NIE Document or NIE-Sponsored Report Not Meeting
Clearinghouse Selection Criteria

REFERENCE: _____
(Title of Document)

- Document will not microfilm or reproduce adequately
- Document has been/will be published as a journal article
- Quality of content is not acceptable
- Other _____
- Comments: _____

Enclosure

FIGURE IV-7: NIE DOCUMENT—SELECTION REPORT



Clearinghouse Accession Log Sheet

Page 1 of 1

CLEARINGHOUSE (CIRCLE ONE): CE CG CS EA EC FL HE IR JC PS RC SE SO SP TM UD

DATE(S): DOCUMENTS SHIPPED 1-6-84 BIBLIOGRAPHIC DATA TRANSMITTED 1-4-84RECEIVED AT FACILITY US JAN 06 1984 ONLINE DATABASE NAME _____SHIPMENT APPROVED BY: Mina Spencer, Associate Director

ACCESSION NUMBER PREFIX	LOG/DOC NUMBER CHECK	DOCUMENT IDENTIFICATION (Author, Last Name or Title, One or Two Words)	LEVEL 11, 20 or 31	COMMENTS
1 PS	011299	Swick	1	
2 PS	011745	Fiene	1	
3 PS	011746	Jennings	1	
4 PS	011775	Raph	1	
5 PS	011783	White House	1	
6 PS	011784	White House	1	
7 PS	011785	White House	1	
8 PS	011786	White House	1	
9 PS	011787	White House	1	
10 PS	011796	SPEAC for	1	
11 PS	011797	Hinze	1	
12 PS	011799	SPEAC for	1	
13 PS	011802	Adcock	1	
14 PS	011803	Sawyer	1	
15 PS	011804	Roth	1	
16				
17				
18				
19				
20				

TOTAL ITEMS IN SHIPMENT. 15SHIPMENT INTENDED FOR JOURNAL CIRCLE ONE: RIECIJEISSUE MONTH CIRCLE ONE: J F M - A V J . A S C . DWEEK OF INPUT CIRCLE ONE: 2 3 4 5 6 7 8 9 10 11 12 13SOURCE JOURNAL CITATION INFORMATION (CIJE INPUT ONLY).

EFF. 10-11-83.

FIGURE IV-8: CLEARINGHOUSE ACCESSION LOG SHEET (COMPLETED)

c. Central ERIC Review

A representative from Central ERIC spends one day a week reviewing all documents going into RIE. From time to time individual Clearinghouse monitors also join in the review. Documents are reviewed for reproducibility problems and quality of content. Questionable documents may be removed by Central ERIC and discussed with the Clearinghouse by the Clearinghouse Monitor. As a result of this review, Central ERIC arrives at a decision to either reject the given document or to reinsert it into the RIE production stream. Care is taken by the Facility to record all such removals so that no document is lost or misplaced.

d. Duplicates

Despite all checks made by both the Facility and the Clearinghouses, however, some duplicates arrive at the Facility for inclusion in RIE. Immediately prior to preparing an issue of RIE, the Facility does a duplicate check by title using the computer to search the ERIC Master File and the issue in preparation. This "final filter," verified manually by the editors, detects approximately half a dozen duplicates per issue. These documents are then removed from the issue. Duplicates can be returned to a Clearinghouse upon request, but are otherwise discarded. A monthly report is prepared (Figure IV-9) listing these duplicates and indicating the issue of RIE in which they were first announced. It is generally considered that duplicates of items announced three or more months prior should have been caught, whereas duplicates of items in process, or in an RIE issue that has not yet been published, are more understandable.

e. ED Number Assignment

ED Accession Numbers are assigned automatically to documents by the computer system as one of the last steps in computer processing. This action is necessarily delayed so that all duplicates, rejects, and other removals can be accomplished before final accessioning takes place. The resulting unbroken sequence of numbers is a system feature which is very useful to readers of the RIE journal, users of the magnetic tapes, and subscribers to the ERIC microfiche collections.

When the computer assignment of the ED numbers has been completed, the Document Control Clerk records the ED number in a standard position (upper left hand corner) on the cover (or first sheet to be filmed) of each document.

f. Single-Frame Resumes

Computer-produced "Single-Frame Resumes" (printouts of the final computer record for each accession) are matched with the documents prior to their transfer to EDRS. These later become "Page 1" of each document microfiche. Additional copies of the "Single-Frame Resumes" are sent to each Clearinghouse at the same time, as advance notice of their RIE announcements for that issue. Figure IV-10 depicts a single frame resume.

REMOVE LIST - RIESEP80

A. DUPLICATES (3)

1. Readmission of Clearinghouse's Own Input

CE 024 335	RIEJUN80	CE 023 716	ED 181 230
FL 011 059	RIEJAN80	FL 010 427	ED 175 242
RC 012 015	RIESEP76	RC 009 219	ED 123 021

2. Duplicates Appearing in RIE Three Months or More Ago

None

3. Duplicates Appearing in RIE in July, August, and September 1980

None

B. REMOTES (13)

CE 024 778	Pulled by CERIC
CE 024 909	Pulled by CERIC
CG 014 290	Pulled by CERIC
CS 005 359	Pulled by CERIC
CS 502 864	Pulled by CERIC
HE 012 502	Pulled by CERIC
HE 012 590	Pulled by CERIC
HE 012 605	Pulled by CERIC
JC 800 301	Pulled by Clearinghouse
PS 011 316	Pulled by CERIC
RC 011 880	Pulled by CERIC
SE 030 563	Pulled by CERIC
TM 800 110	Pulled by CERIC

C. DELAYED (0)

None

FIGURE IV-9: RIE ISSUE—REMOVE LIST

DOCUMENT RESUME

ED 189 119

TM 800 284

AUTHOR Boker, John R.; Games, Paul A.
TITLE Effects of Motivational and Situational Variables on Achievement Performance.
PUB DATE Apr 80
NOTE 24p.: Paper presented at the Annual Meeting of the American Educational Research Association (64th, Boston, MA, April 7-11, 1980).
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Achievement Need: Aspiration: *Difficulty Level:
*Expectation: Failure: Goal Orientation: Higher Education: *Problem Solving: Puzzles: Self Evaluation (Individuals): Sex Differences: *Success: *Transfer of Training
IDENTIFIERS Achievement Scales (Mehrabian): *Anagrams

ABSTRACT

Problem-solving performance and goal-setting behavior were investigated in 156 undergraduates who, on Mehrabian's Achievement Scales, demonstrated either the motive to approach success or the motive to avoid failure. Different expectations of success or failure were induced by fictitious preperformance information. The degree of success or failure actually experienced on the experimental tasks was manipulated by providing anagrams (word games) which varied in objective difficulty (very easy, average difficulty, insoluble). Results showed that only the degree of experienced success or failure significantly influenced problem-solving performance and subjective correlates of satisfaction and ability ratings. Also, individual differences in achievement motives were found to be consistently associated with predicted patterns of goal-setting behavior and task difficulty preferences. Results were discussed in terms of the transfer effects of prior success or failure experiences. (Authcr/CP)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

FIGURE IV-10: SINGLE-FRAME RESUME (COMPUTER PRODUCED)

g. Reply Cards

All Reply Cards attached to the documents are removed at this time and the ED number assigned to the document noted on the cards. The Document Control Department then mails the cards.

h. Transfer of Documents to EDRS

Each monthly shipment of documents from the Facility to the ERIC Document Reproduction Service (EDRS) is packaged carefully by the Document Control Department. Special care is taken to arrange the documents in numerical sequence in strong boxes, plainly marked on the outside with the corresponding ED numbers. This expedites the handling and filming of the documents by EDRS. After a telephone call from the Facility, EDRS arranges to have the boxes picked up by a messenger service and delivered to them in Arlington, Virginia. A telephone call to Central ERIC advises the Facility Monitor that the shipment has gone to EDRS and that the countdown on microfiche preparation may begin.

3. Handling Microfiche Shipped to the Facility by EDRS

a. Microfiche Distribution

For each issue of RIE, the Facility receives two complete sets of microfiche. One set is housed in the Facility Reference Library for reference and archival purposes. The second set is divided by Clearinghouse and shipped to the Clearinghouses for their use in distributing complimentary microfiche to contributors.

b. Microfiche Inventory and Quality Control Check

The archival set of microfiche shipped from EDRS to the Facility is inspected frame by frame. Each microfiche receives a qualitative "score" and a quantitative "score." A summary report is prepared citing the scoring results in statistical fashion and reporting the particular fiche found to be marginal or unacceptable. Each Clearinghouse receives a microfiche copy of this summary report and should review the Clearinghouse's own input. The Microfiche Inventory Report prepared by the Facility is next reviewed by EDRS and where previously undetected filming errors are the cause of the problem, documents are refilmed and the resultant fiche are redistributed to standing order customers. The results of the EDRS review are reported to Central ERIC by letter. A copy of this letter is listed as an Attachment to each month's *ERIC Administrative Bulletin* (Figure IV-11).



DOCUMENT REPRODUCTION SERVICE
P.O. Box 190 ARLINGTON, VIRGINIA 22210 • (703)841-1212

OPERATED BY: COMPUTER MICROFILM INTERNATIONAL, CORP.

September 3, 1980

Mr. Jim Prevel
National Institute of Education
1832 M Street, N. W.
Washington, D. C. 20208

Dear Jim:

We have reviewed the RIE June 1980 Microfiche Inventory and Quality Check and the following is submitted.

1) Remakes: ED 181 641
ED 182 085
ED 182 332

2) The following documents are not recommended for refilming:

<u>ACCESSION</u>	<u>CLHSE</u>	<u>LEVEL</u>	<u>NOTE</u>	<u>REASON FOR NOT REFILMING</u>
181 467	CS	1	NO	No problem found. Replacement sent to Facility
181 953	JC	1	NO	No problem found. Replacement sent to Facility.
182 012	PS	1	NO	Light broken print.
182 225	SO	2	NO	Filmed as received.
182 270	SP	1	NO	No problem found. Replacement sent to Facility.

Sincerely,

John N. Veale
Director

FIGURE IV-11: MICROFICHE INVENTORY AND QUALITY CONTROL CHECK—EDRS RESPONSE

C. Clearinghouse Handling

1. Receiving

The majority of the documents received by the Clearinghouses arrive through their own efforts. The Facility program provides supplementary input. In some few cases, documents are transferred from one Clearinghouse to another.

a. Logging, Checking, and Establishing Basic Control

The exact nature of the logs and files maintained by the Clearinghouses to control incoming documents is up to the individual Clearinghouse. As indicated in Section II.E.11, certain basic statistics must be reported quarterly to Central ERIC. It is advisable, therefore, that the Clearinghouse develop a log, file, or other type of record, that gathers, as a minimum, the following types of information about incoming documents:

- Date Acquired;
- Title;
- Author;
- Source (e.g., State, local, Federal, Facility, academic, non-profit, commercial, foreign, international, etc.);
- Contributor (if different from source);
- Disposition (e.g., RIE, local files, transfer, duplicate discard, etc.)

It is also a fairly uniform practice among acquisitions operations to maintain an "On-Order" file, so that the results of specific requests or orders for documents can be determined and followed-up, if necessary.

b. Inter-Clearinghouse Transfers

Any Clearinghouse may send a document directly to another Clearinghouse. This includes those documents received from the Facility (with the exception of PRIORITY documents, which should not be transferred because of the time factor).

Clearinghouses should not discard good quality education-related documents just because they are not within their own scope of interest. Such documents should be routed to the cognizant Clearinghouse, or, if that is ambiguous or uncertain, to the Facility for assignment.

Any Clearinghouse learning of a document that is being processed by another Clearinghouse (e.g., by receipt of a Scope Overlap information sheet from the Facility), but

which it feels should be processed by itself, is at liberty to contact the other Clearinghouse and negotiate for the document in question.

Document Transfer Forms (Figure IV-12) are available from the Document Control Department at the Facility.

c. Information of Use to Document Processors

The Clearinghouse receiving function should ensure that information of use to document processors (e.g., letters from authors) is not discarded, but is retained with the document.

All special instructions and correspondence arriving with documents from the Facility should also be kept with the documents through the document processing phase.

d. NIE/ED Sponsored Reports

All NIE/ED-sponsored reports must be cleared by NIE/ED Project Officers before they can be processed. Normally the Clearinghouses receive such reports from the Facility; it can be assumed that these reports have been given clearance. Any NIE/ED contract/grant reports received from other sources must be cleared through the ERIC Facility before they can be processed. This clearance must be sought in writing (send copy of title page with request). (See Section II-E.6 for further details.)

Any NIE or NIE-funded report that is sent by the Facility to a Clearinghouse and then not selected for RIE, must be returned to the Facility with a form attached indicating the reason for rejection. Forms for this purpose (see Figure IV-7) are available from the Facility's Document Control Department.

e. Duplicate Checking

It is the responsibility of the Clearinghouses to check all documents received to determine whether they are duplicates of those already in the system or duplicates of items in-process at one of the Clearinghouses (including possibly their own). The further a duplicate makes it through the system, the more time, money, and effort are wasted. A duplicate that is announced in RIE adds nothing to the file and presents "noise" to the users.

The first question that must be asked is whether the document is already in RIE. In order to determine this, searches can be made of RIE itself (using the cumulative and issue indexes), the cumulative *Title Index* (and its quarterly supplements), and in certain situations, the *Contract/Grant Number Index* and the *Report/Project Number Index*. Close attention should be paid to the date of publication in making this check. A document



DOCUMENT TRANSFER FORM

Date Received: _____ Date Transferred: _____

TO: ERIC/ _____

FROM: ERIC/ _____

The enclosed document(s) appear to be more within your scope than ours.

The document(s) were obtained by (check one):

- solicited contribution
 - unsolicited contribution
 - staff contribution
 - ERIC Facility

Correspondence information is as follows:
(check one):

- all relevant material is attached
 no relevant correspondence; however the name and address of the contributor or contact person is (if known):

Clearinghouse Contact Person

(EFF-70)

FIGURE IV-12: DOCUMENT TRANSFER FORM

dated 1980 could obviously not have been announced (in identical form) in 1979 or earlier, thus limiting the search that must be made.

The second question is whether the document is in-process anywhere. In order to determine this, searches should be made of the *Acquisitions Data Report* (ADR) and of the Clearinghouse's internal files. The ADR is the system-wide tool for determining what is in-process at the various decentralized processing centers of the ERIC network.

If the document is not found in either of the two checks described above, an entry should be made immediately for it in the ADR (see Section IV.C.1.m) for how to do this). This action essentially "stakes a claim" for the document. (Other Clearinghouses finding an entry for the document in the ADR will realize that it is pre-empted and treat it as a duplicate.) The document may then be passed forward for cataloging, indexing, and abstracting.

If the document is found to be a duplicate and already in RIE, it can be discarded. If it is found to be a duplicate in-process, the ADR "intended use" code should be checked. If the first Clearinghouse in possession of the document has it in a hold status, the second Clearinghouse can evaluate the document with this information in hand, contacting the first Clearinghouse if desired. If the second Clearinghouse is in a better position to announce the document, an entry reflecting this decision should be prepared for the ADR.

Sometimes two or more Clearinghouses receive the same document simultaneously and their respective entries for the ADR appear there simultaneously. Duplicate ADR entries are identified by an asterisk (*). (Note: A minor character variation in entry will void the asterisk. The ADR must, therefore, be used carefully, with all possible title variants consulted.) When a Clearinghouse detects such entries, it should contact the other Clearinghouse(s) involved and negotiate a settlement satisfactory to all concerned. Similarly, any questions as to which Clearinghouse should most appropriately process a document should be resolved by telephone. Processing information or reproduction releases that may already have been generated or obtained by one of the Clearinghouses can usefully be transferred in many instances.

f. Reproduction Release Forms and Corresponding Labels

Unless a document:

- (1) has been produced or sponsored by the Federal Government;
- (2) specifically waives copyright and reproduction rights; or
- (3) was produced before January 1978 and carries no copyright or other restrictions,

the Clearinghouse should seek permission to reproduce from the copyright (or proprietary rights) holder. This procedure is described in detail in Section II.E.8. In some cases ERIC has secured Blanket Reproduction Releases. These arrangements are noted in the *ERIC Acquisitions Arrangements* list and this list should be checked to ascertain whether such permission has been granted. If so, processing can proceed without any further reproduction release action. Reproduction permission should always be obtained on a standard form (Figures IV-13A-B). Signed release forms must be kept on file indefinitely at the Clearinghouses obtaining them.

If permission to reproduce for ERIC purposes is obtained, the Clearinghouse must affix the appropriate Level 1 or Level 2 Reproduction Release Label (Figures IV-14A-B), with the name of the authorizing person or organization filled in, to the cover (or first sheet to be filmed) of the document (Figure IV-15). This procedure ensures that the labels will appear prominently on the first frame of the microfiche.

NOTE: The labels should reflect the permission actually given. If subsequent decisions relative to reproducibility cause a reduction in processing Level from 1 to 2, 1 to 3, or 2 to 3, this should not affect the label. EDRS determines filming level from the computer record, not the label.

g. NIE Policy Disclaimer Label

It is important that recipients of ERIC microfiche and reproduced hard copies of documents understand that the documents are collected from a variety of sources and that they are not necessarily reflections of NIE official positions. It is common for organizations such as ERIC, producing abstract journals and operating information systems, to "disclaim" responsibility for the documents they control and disseminate.

To this end, a standard *NIE Policy Disclaimer Label* (Figure IV-16) must be properly marked and affixed to every document processed at Level 1 or Level 2. (In the case of Level 3, there is no document in hand and none is later disseminated by ERIC, so no sticker is required.)

The label should be affixed to the cover (or first sheet to be filmed) of the document (see Figure IV-15). This ensures that the label will appear prominently on the first frame of the microfiche. The label is stocked by the ERIC Facility Document Control Department and supplies may be obtained upon request.

h. Reply Cards (Acknowledgments to Contributors)

The Facility makes use of Reply Cards (see Figure IV-6) to respond to document contributors who wish to be informed of the disposition (and ED number) of their documents. When the



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

REPRODUCTION RELEASE (Specific Document)

I. DOCUMENT IDENTIFICATION

Title: _____ Date: _____
Author(s): _____
Corporate Source (if appropriate): _____

II. REPRODUCTION RELEASE

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources In Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the options and sign the release below.

CHECK
HERE

Microfiche
(4" x 6" film)
and paper copy
(8½" x 11")
reproduction

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
[AS APPROPRIATE]
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

OR

Microfiche
(4" x 6" film)
reproduction
only

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
[AS APPROPRIATE]
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed in both microfiche and paper copy.

SIGN
HERE

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction of microfiche by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: _____ Printed Name: _____
Organization: _____
Address: _____ Position: _____
_____ Tel No: _____
_____ Zip Code: _____

III. DOCUMENT AVAILABILITY INFORMATION (Non-ERIC Source)

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

Publisher/Distributor: _____
Address: _____
Price Per Copy: _____ Quantity Price: _____

IV. REFERRAL TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

EFF-53 (Rev 1/81)

FIGURE IV-13(A): REPRODUCTION RELEASE FORM (SPECIFIC DOCUMENT)



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

REPRODUCTION RELEASE (Blanket)

I. DOCUMENT IDENTIFICATION (Class of Documents)

All publications: _____

Series (Identify Series): _____

Division/Department Publications (Specify): _____

II. REPRODUCTION RELEASE

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). To reduce the number of individual requests that must be made for reproduction release, ERIC attempts where feasible to obtain a blanket release for all documents submitted by an organization. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the above class of documents please CHECK ONE of the options and sign the release below.

CHECK HERE →

Microfiche
(4" x 6" film)
and paper copy
(8½" x 11")
reproduction

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
AS APPROPRIATE
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

OR Microfiche
(4" x 6" film)
reproduction
only

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY
[PERSONAL NAME OR ORGANIZATION]
AS APPROPRIATE
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed in both microfiche and paper copy.

SIGN HERE →

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction of microfiche by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: _____ Printed Name: _____
Organization: _____
Address: _____ Position: _____
_____ Tel. No.: _____
_____ Zip Code: _____

III. DOCUMENT AVAILABILITY INFORMATION (Non-ERIC Source)

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

Publisher/Distributor: _____
Address: _____
Price Per Copy: _____ Quantity Price: _____

IV. REFERRAL TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

EFF-57 (Rev. 1/81)

FIGURE IV-13(B): REPRODUCTION RELEASE FORM (BLANKET)

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

FIGURE IV-14(A): REPRODUCTION RELEASE LABEL
LEVEL 1 (MICROFICHE AND PAPER COPY)

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

FIGURE IV-14(B): REPRODUCTION RELEASE LABEL
LEVEL 2 (MICROFICHE ONLY)

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

FIGURE IV-16: NIE POLICY DISCLAIMER LABEL

ED123456

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

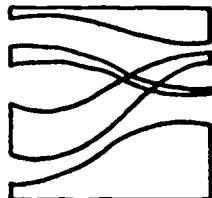
R. Rossmiller

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned
this document for processing
to

TM CS

In our judgement, this document
is also of interest to the clearing-
houses noted to the right. Index-
ing should reflect their special
points of view.



TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

Technical Report No. 544

Interim Report: The Refinement of the Test Battery to Assess Word Identification Skills

by Dale D. Johnson, Susan D. Pittelman,
Judy Schwenker, and Linda F. Shriberg

TM 800704

July 1980

Wisconsin Research and Development
Center for Individualized Schooling

2

FIGURE IV-15: TITLE PAGE (SHOWING POSITIONS OF CLEARINGHOUSE
ACCESSION NUMBER, NIE POLICY DISCLAIMER LABEL,
REPRODUCTION RELEASE LABEL, AND SCOPE OVERLAP LABEL)

Clearinghouses receive documents from the Facility with Reply Cards attached to them, they should only detach and mail the self-addressed card if the document is rejected (citing the reason for rejection is optional). If the document is selected for RIE, the card should simply be left on the document. The Facility will mail the card to the contributor later, after the ED number has been assigned and recorded on the card.

Clearinghouses may make use of similar cards, if they wish, simply by affixing them to the covers of documents. The cards should be fully addressed, postage supplied, titles supplied on the back, and stapled (back side up) at the top center of the document cover. The Facility will handle such Clearinghouse-affixed cards in the same way that it handles its own.

NOTE: Care should be taken not to automatically send such routine "thank you" notes to inappropriate sources; e.g., a state governor's office.

i. PRIORITY Document Handling (By Clearinghouses)

Most documents received at the Clearinghouses from the ERIC Facility are not accompanied by any special forms and are ROUTINE, meaning that they can be treated like any other documents that arrive as candidates for RIE.

However, a few documents are classified (usually by Central ERIC) as PRIORITY. Selection of these items for RIE is still up to the discretion of the Clearinghouses; however, they should be evaluated immediately and, if selected, processed as quickly as possible. The PRIORITY Form (see Figure IV-5) should be left attached to the document throughout processing, to ensure its continued quick handling at all stages. All regular processing steps are observed, but are expedited. The Form indicates the issue of RIE in which the document should be included. Usually this is the very next issue still open to accessions. The speed that is necessary in processing can be determined from the ERIC Master Schedule, copies of which are sent to each Clearinghouse at the beginning of the year. Normally this will involve returning the document to the Facility in the next working week following receipt; however, in extreme cases, 24-hour turnaround may be necessary to make the deadline. If for any reason, this specified schedule cannot be met, the Clearinghouse should notify the Facility.

When the PRIORITY document is shipped to the Facility, it must be mailed separately on a separate Log Sheet.

From time to time, Clearinghouses have their own PRIORITY documents that they wish to expedite by moving the document up to the next issue of RIE still open to accessions. When such a document is processed, it should also be shipped separately on a separate Log Sheet with a notice plainly identifying the document as requiring PRIORITY handling.

j. Clearinghouse Accession Numbers

Since the final and permanent ED accession number is assigned late in the processing cycle, it becomes necessary to generate a preliminary accession number in order to identify each document while it is in-process.

The time at which a Clearinghouse assigns a Clearinghouse Number varies somewhat from Clearinghouse to Clearinghouse but all must have a number assigned when the document is listed on the ADR form.

Each Clearinghouse in the ERIC system is identified by a two-letter alpha prefix, e.g., CE, FL, UD, etc. (see Figure I-4 for a complete list). This prefix, together with a six-digit number, forms a preliminary Clearinghouse Accession Number. Up to the time they are announced in RIE, all documents (and associated paperwork) are identified and referred to by this number. Since RIE announcements are grouped by Clearinghouse, this number becomes, in effect, the "sort key" for each RIE issue.

Each Clearinghouse should maintain a log so as to keep track of numbers assigned and to avoid assigning the same number twice. However, Clearinghouses do not have to use every number in sequence. Numbers may be skipped or used out of sequence if necessary. When assigned to a document, the Clearinghouse Accession Number should be stamped or written in the lower left hand corner of the document cover (or first sheet to be filmed).

Documents consisting of several separate parts or volumes which can be processed at the same time should ideally be arranged numerically and assigned consecutive Clearinghouse numbers (e.g., Vol. 1 (IR 101209); Vol. 2 (IR 101210), Vol. 3 (IR 101211), etc.) in order to keep them together throughout processing and subsequent announcement.

Similarly, documents that are legal-size (8½" to 10" x 14") that can be filmed in one frame only if EDRS employs a time-consuming lens change (e.g., 29X) should also, whenever possible, be grouped and assigned consecutive accession numbers.

Each issue of RIE contains a "Clearinghouse Number to ED Number Cross-Reference List" for that issue. In addition, each December the Facility produces a cumulated version of this listing for the entire RIE file to date.

k. Scope Overlap Label (Figure IV-2)

When the Facility is faced with a document whose subject matter overlaps the scope of two or more Clearinghouses, it must decide which Clearinghouse best seems to match the major thrust and emphasis of the document. The document is assigned for processing to this "prime" Clearinghouse. However, affixed to the cover is a label that informs the prime Clearinghouse of the other Clearinghouses that might feel they have a claim on the document. Reproduced copies of the title page bearing the label are sent by the Facility to these alternative Clearinghouses. In this way, the alternative Clearinghouses are informed of a document that deals with their subject area and that they might even be in the process of requesting or using. If they question the assignment decision, they can call the "prime" Clearinghouse and negotiate the matter. The Clearinghouse actually receiving the document is likewise alerted that it should take into account the retrieval viewpoints of the other Clearinghouses during the indexing process. The *ERIC Clearinghouse Scope of Interest Guide* (Appendix A) is the principal tool used in determining these viewpoints.

l. Complimentary Microfiche (to Contributors)

Each month the Facility transmits to each Clearinghouse the segment of that month's ERIC microfiche collection that was input by that Clearinghouse. These microfiche are to be sent to authors or contributors as a complimentary "thank you" for submitting their documents to ERIC. The text of the letter or note accompanying the microfiche to the contributors is at the discretion of the Clearinghouses. This practice is *mandatory*.

m. Acquisitions Data Report (ADR)

Because of the decentralized nature of the ERIC system, it is necessary to devise some way for each of the Clearinghouses to be able to check on which documents are being processed by the other Clearinghouses. The differing subject specializations of each Clearinghouse are not enough to avoid potential duplicate effort. Document topics have a way of overlapping Clearinghouses, and it is not unusual for two or more Clearinghouses to feel equally justified in processing a given document.

The *Acquisitions Data Report (ADR)* is intended to accomplish this coordination. It is a composite list incorporating the previous month's selections of all the Clearinghouses. Only documents selected for announcement in RIE should be included in the ADR. It should not include any rejects, referrals, material retained solely for local files, or material not yet evaluated/selected. It is produced monthly by the Facility on the basis of input received from the Clearinghouses. The current format is a six-month running cumulation (e.g.: January-June, February-July, March-August, etc.), with entries made by title. See Figure IV-17 for a sample ADR page.

ERIC CLEARINGHOUSE ACQUISITIONS DATA		NOV 80	PAGE 62		
TITLE	ACCESS NO	PAGES	FED. DATE	DISP	ENT. DATE
INSTRUCTIONAL MATERIALS ON AFRICA FOR PRIMARY GRADES. AN INSTRUCTIONAL MEDIA, ATTITUDE FORMATION AND CHANGE: A CRITIC	SO012684	34	JUL78		07-80
INSTRUCTIONAL MEDIA FOR GRAHAM IN THE STATE LIBRARY NETWORK. A	IR008930	52	22APR80	1	10-80
INSTRUCTIONAL MODEL OF THE COMPOSING SITUATION.	IR008777	10	80	1	CE-80
INSTRUCTIONAL MODEL ON MEXICAN CULTURE	CS205902	37	JUN80	.1	11-80
INSTRUCTIONAL MODEL OF MEXICAN CULTURE	SO012838	46	79		*10-80
INSTRUCTIONAL RESOURCES MCNGEAPH SERIES: ACTIVATED	FL011542	46	79		*CE-80
INSTRUCTIONAL VARIABLES AND STUDENT ACHIEVEMENT	SE032760	166	JUL80	1	09-80
INSTRUCTIONAL VARIABLES AND STUDENT ACHIEVEMENT IN READING A	TM800305	39	MAY78	1	*05-80
INSTRUCTION IN STUDENT-GENERATED QUESTIONING TECHNIQUES.	SP015232	39	MAY78		*12-79
INSTRUCTION MANUAL FOR COPL (THE CORNELL UNIVERSITY)	CS005508	12	APR80	1	07-80
INSTRUCTIONS FOR ADMINISTRATION OF THE MATERNAL INTERACTION	SE031518	152	67	2	08-80
INSTRUCTOR'S HANDBOOK: NCRTB CAROLINA OUTWARD LOOK SCHOOL	TM800667	20	76	1	11-80
INSTRUCTOR'S MANUAL: DEVELOPMENT OF HIGHER LEVEL THINKING AB	RC011809	NP	73	1	*02-80
INSTRUCTOR'S MANUAL: EDUCATION FOR SOCIAL WORK PRACTICE WITH	SP016185	300	AUG79	1	07-80
INSTRUCTOR'S MANUAL FOR TEACHING THE PRACTICAL COURSES	RC012047	NP	79	1	CE-80
INSTRUCTORS' MANUAL FOR TRAINING VOCATIONAL TEACHERS TO PREP	SE033155	141	JUN79	1	11-80
INSTRUCTORS TO SET-UP AND OPERATE A VIDEO SYSTEM. FROPS	CE025140	68	MAY78	1	C7-80
INSTRUMENTAL ANALYSIS OF THE VOICING CONTRAST IN WORD-INITIAL	CE026544	58	80	1	10-80
INSTRUMENTATION IN BIO-MEDICAL RESEARCH. PUBLICATION	FL011802			1	05-80
IN SUPPORT OF LARGE SCALE COLLEGE ATHLETICS.	SE031838	14	DEC56	2	09-80
INTEGRATED STUDENT DIAGNOSIS AND INSTRUCTIONAL MODEL: A SUPPORT	SP016171	14	12APR80		07-80
INTEGRATING ACADEMIC PLANNING AND BUDGETING IN A RAPIDLY CHANGING	JC800450	36	11JUN80	1	CE-80
INTEGRATING ADULT DEVELOPMENT THEORY WITH HIGHER EDUCATION	HE013135	137	80		10-80
INTEGRATING COMMUNICATION RESEARCH: THEORY OR "IMPAULSIVE BEHAVIOR"	HE013220	27	80		11-80
INTEGRATING COMPETENCY TESTING WITH VOCATIONAL-TECHNICAL PROGRAM	CS502999	21	MAY80	1	05-80
INTEGRATING COURSE WORK WITH FIELD WORK PLACEMENTS IN UNDERGRADUATE	CG014605	8	26MAR80	1	08-80
INTEGRATING CULTURAL DIVERSITY INTO MEN-SEX-BIASED CURRICULUM	UD020946	129	29MAR80	1	05-80
INTEGRATING EDUCATION IN LIBRARIES AND INFORMATION SCIENCE	IR008650	8	APR78	1	*C7-80
INTEGRATING EDUCATION IN LIBRARIANSHIP AND INFORMATION SCIENCE	IR008687	9	APR78	1	*07-80
INTEGRATING FIELD AND LABORATORY INVESTIGATIONS OF TELEVISION	PS011691	19	SEP80	1	05-80
INTEGRATING INTERPERSONAL AND SMALL GROUP ORAL COMMUNICATION	CS502968	26	MAY80	1	CE-80
INTEGRATING QUANTITATIVE AND ETHNOGRAPHIC METHODS TO DESCRIBE	EA012940	NP	APR80	1	09-80
INTEGRATING THE TECHNICAL AND THE POLITICAL: THE CASE OF AN	HE012862	15	APR80		07-80
INTEGRATING OF BURNOUT INTO A STRESS MODEL.	CG014586	37	80	1	C7-80
INTEGRATION OF COURSE CONTENT, TECHNOLOGY AND	SE031234	31	DEC70	2	*07-80
INTEGRATION OF EMPLOYMENT AND FAMILY ROLES AMONG WOMEN I	CE025172	20	FEB77	1	06-80
INTEGRATION OF POPULATION EDUCATION IN DEVELOPMENT PROGRAMME	SO012586	12	79		06-80
INTEGRATION OF RESEARCH FINDINGS FROM INVESTIGATIONS OF P	IR008455	27	FEB80	1	*04-80
INTEGRATION OF RESEARCH FINDINGS FROM INVESTIGATIONS OF P	SP015602	26	80		*02-80
INTEGRATION OF SCHOOL AND FAMILY NEEDS BY WOMEN RETURNING	CE024241	8	FEB80	1	06-80
INTEGRATION OF SPEECH THERAPY TECHNIQUES WITH THOSE OF MO	EC131389	8	APR80		11-80
INTEGRATION OF WOMEN CADETS INTO THE AIR FORCE ACADEMY	HE012912	9	SEP79		07-80
INTEGRATIVE MODEL FOR TEACHING READING AND WRITING BASED	CS205596	12	MAR80	1	06-80
INTELLECTUAL AND BEHAVIORAL STATUS OF CHILDREN BORN TO ADOLESCENTS	EC124510	15	SEP79		07-80
INTELLECTUAL FREEDOM IN THE PUBLIC SCHOOLS: AN ASSESSMENT OF	EA012959	199	SEP80	1	09-80
INTELLIGENCE AND NONENTRANCEMENT	TM800650	49	APR80		11-80
INTELLIGENCE TESTING 1928-1978	TM800599	28	79	1	10-80
INTELLIGENT SUPPORT SYSTEM FOR ENERGY RESOURCES IN THE US	IR008667	9	APR80	1	07-80
INTENSIVE HOME-EASED TREATMENT INTERVENTIONS WITH MENTALLY RETARDED CHILDREN	EC130837	19	MAR80		10-80
INTERACTION AND ROLE STRAIN: ONE-PARENT VERSUS TWO-PARENT SIBLINGS	CG014667	15	14AUG79	1	05-80
INTERACTION: A TEACHER-TRAINING SIMULATION CONCERNED WITH	SE031957	8	74	2	09-80
INTERACTION BETWEEN CONCEPTUAL LEVEL AND TRAINING METHOD IN	IR008252	21	79	1	*02-80
INTERACTION BETWEEN CONCEPTUAL LEVEL AND TRAINING METHOD IN	SP015516	19	79		*02-80
INTERACTION BETWEEN CONCEPTUAL LEVEL AND TRAINING METHOD IN	HE012243	19	79		*01-80
INTERACTION BETWEEN SEX REFERENCES IN TEST ITEMS AND READING	CS005608	12	78	1	10-80
INTERACTION OF PUBLIC ASSISTANCE AND STUDENT FINANCIAL AID	HE013168	19	SEP80		10-80
INTERACTION OF SELF-CONCEPT, TELEVISION, AND LEISURE ACTIVITY	PS011749	9	JUN80	1	10-80
INTERACTIONS BETWEEN ITEM CONTENT AND GROUP MEMBERSHIP ON A	TM800659	19	APR79	1	11-80
INTERACTIONS OF STUDENTS' KNOWLEDGE WITH THEIR COMPREHENSION	SE031435	88	APR80	2	*08-80
INTERACTIONS OF STUDENTS' KNOWLEDGE WITH THEIR COMPREHENSION	SE031482	90	APR80	1	CE-80
INTERACTIVE ACTIVATION MODEL FOR THE EFFECT OF CONTEXT IN	CS005644	104	JUL80	1	10-80
INTERACTIVE ACTIVATION MODEL OF THE EFFECT OF CONTEXT IN	CS005543	95	MAY80	1	08-80
INTERACTIVE COMPUTER ADMINISTRATION OF A SPATIAL	TM800516	72	APR80	1	09-80
INTERACTIVE COMPUTER-EASED APPROACH TO AID GROUP PROBLEM	CS502981	16	JAN80	1	05-80
INTERACTIVE EFFECTS OF COLOR AND COGNITIVE STYLE ON A PI	IR008917	33	23APR80	1	10-80
INTERACTIVE INCONGRUITTY HUMOR THEORY DEPICTED IN SOCIAL-NORM	SP016152	NP	ND		06-80
INTERACTIVE MODEL OF RESEARCH AND DEVELOPMENT IN TEACHING	SP016863	23	ND	1	11-80
INTERAGENCY COOPERATION AND AGREEMENTS. POLICY PAPER SERIES:	CE027004	75	MAY80	1	11-80
INTERASSOCIATION CHILD CARE CONFERENCE. CONFERENCE PROCEEDINGS	CG014648	149	79	1	08-80
INTERCULTURAL EDUCATION. PASTEACK 142.	SO012610	38	80		06-80
INTERDISCIPLINARITY IN GENERAL EDUCATION: PROBLEMS IN CURRICULUM	HE012945	20	MAY80		07-80
INTERDISCIPLINARY APPROACH FOR SERVICE DELIVERY IN A RURAL AREA	EC124568	21	OCT79		08-80
INTERDISCIPLINARY CO-OPERATION.	FL011897		78	1	*10-80
INTERDISCIPLINARY COOPERATION PANEL PLANNING COMMITTEE	SE029906	70	SEP65	2	*02-80
INTERDISCIPLINARY GRADUATE PROGRAM IN POLICY ANALYSIS.	SE030887	31	OCT73	2	06-80
INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE	SE029974	80	MAY79	2	*02-80

FIGURE IV-17: ACQUISITIONS DATA REPORT—SAMPLE PAGE

The ADR is intended as a supplement to the cumulated *Title Index*. The *Title Index* incorporates all items having an ED number; the ADR incorporates all items in process during the previous six months, but not yet assigned ED numbers.

At the time a Clearinghouse decides to assign a Clearinghouse Accession Number to a document, the accession should be recorded on the ADR Input Form (Figure IV-18). These forms are available from the ERIC Facility. On the last working day of every month the Clearinghouse should send to the Facility (separately and via Certified Mail) the ADR Input Forms containing records for all the documents accessioned during that month. The Facility waits until it has received input from all Clearinghouses (about one week), then keys the data, enters it into the special Acquisitions Data File, produces the ADR report, prints the report, and distributes copies to all Clearinghouses. The ADR containing a given month's data is available approximately three (3) weeks after the cut-off (or about the 21st of the next month).

The instructions for completing the ADR Input Form are as follows:

- Clearinghouse Accession Number

Enter the Clearinghouse Accession Number in Columns 1-8, e.g., "CE123456."

- Pagination

Enter the number of pages right-justified in Columns 9-12, e.g., 1357. This figure can be the last numbered page in the document and need not be an exact count. Unpaginated documents greater than ten (10) pages in length may be described here as "NP," i.e., not paginated. Pagination is intended as an additional discriminator to assist editors in differentiating items with similar titles.

- Publication Date

Enter the publication date right-justified in Columns 13-19, e.g., "15May77," or "May77," or "77." Like pagination, publication date can help editors in telling like items apart.

- Disposition

Enter the code for "Disposition" in Column 20. The sole permissible codes are as follows:

1 = Selected for RIE, ready for immediate processing.

2 = Selected for RIE, on hold awaiting release, legible copy, etc.

3 = Selected for RIE, but for various reasons could not be processed.

Completion of this field is mandatory. Transfers, rejects, and items retained solely for local files should not be reported.

If the disposition of a document is changed, its ADR record should be changed accordingly at the next opportunity.

• Title

Enter the title in Column 21-80. Record the title exactly as it appears on the document, including initial articles and initial punctuation marks or special characters. This simple rule will facilitate both the original making of entries and the later comparison of titles during duplicate checking. Truncate the title if necessary, but do not abbreviate words in the title. Documents with titles that are the same throughout their length (or for at least 60 characters of their length) should be differentiated from one another by the addition of some distinguishing data, e.g., Vol. 1, Vol. 2, etc.

The month to which the data pertain should be recorded in the upper left corner of the ADR in the space provided. Since several sheets will normally be required to report one Clearinghouse's accessions, the sheets should be numbered in the upper right hand corner, e.g., Sheet 1 of 3, 2 of 3, 3 of 3, etc. Space is also provided for the date completed and the preparer's name.

Since keying is done directly from the forms, entries should either be typed or written neatly in unambiguous block capitals. When writing, the space marks on the form should be observed in order to ensure clarity. When typing, the space marks on the form can be ignored. Punctuation and special characters may be used only in the title field. The following conventions should be used when writing:

<u>Alpha Character</u>	<u>Number</u>
Ø (oh)	0 (zero)
I (eye)	1 (one)
Z (zee)	2 (two)

Please note that the ADR Input Form is not an OCR form and it is not necessary to use an OCR typewriter or to follow the OCR input conventions when keying this form.

MONTH (NUMERIC) _____

DATE COMPLETED _____

PREPARER _____

SHEET _____ OF _____

ERIC CLEARINGHOUSE - ACQUISITIONS DATA REPORT FORM

EFF 15 (2/77)

Disposition Codes (Mandatory): * 1 = Selected for BIE - Immediate Processing Possible

- 1 - Selected for RIE-Immediate Processing Possible
 - 2 - Selected for RIE-Processing Delayed, Must Be Held for Release or Other Reason
 - 3 - Selected for RIE-Processing Could Not Be Completed (For Reason Consult Clearinghouse)

FIGURE IV-18: ACQUISITIONS DATA REPORT—INPUT FORM
Page 1 of 2

**RULES FOR
ENTRY OF
DATA:**

1. Data may be block lettered or typed. When lettering, follow the indicated spacing for clarity. When typing, the space marks may be ignored.
 2. Observe the maximum number of characters indicated in the column heading for each of the fixed length fields (columns 1 - 20).
 3. Punctuation and special characters may be used only in the title field.
 4. Pagination need not be exact, but may be the number given on the last sequentially-numbered page of the document. Unpaginated documents should be described as "NP" (not paginated), if over 10 pages. Pagination here is intended only to provide a basis for comparison between two or more potential duplicates.
 5. Recording of a "Disposition Code" is optional. Clearinghouses should use the ADR for all RIE candidates, but may use it for other accessions as well.
 6. Enter the title exactly as it appears on the document, including initial articles, punctuation, and special characters (e.g., quotation marks, parentheses). This simple rule will facilitate both the original making of entries and the later comparison of titles. A maximum of 60 characters of the title will be recorded. If you should type more than 60 characters on the form, the excess characters will be deleted. Documents with titles that are the same for their entire length, or for more than 60 characters, should be distinguished from one another by title truncation and the addition of some distinguishing data, e.g., Vol. 1, Vol. 2, etc.

FIGURE IV-18: ACQUISITIONS DATA REPORT—INPUT FORM
Page 2 of 2

Each monthly ADR will display in alphabetic sequence all title records gathered from the ADR Input Form during the previous six months and all potential duplicates gathered during the previous year. Potential duplicates will be flagged by printing an asterisk adjacent to the entry date column. Additionally, each Clearinghouse will receive monthly one copy of a customized Activity/Exception Report for that month.

Potential duplicates will be adjudged to be records that have the same title for as long as the shorter of the titles. This convention is necessary due to the variable practices in recording subtitles, series titles, etc. For example, suppose the following two titles have been entered into the system.

Title 1: Motorcycle Safety Education
Title 2: Motorcycle Safety Education. A Curriculum Guide.

The computer will flag these two titles as duplicates, leaving it to human editing to discern if they truly are duplicates. For the purposes of sorting and checking for potential duplicates, the leading articles and all special characters except the left parenthesis will be ignored. (However, these same characters will print in the ADR as part of the title, as recorded by the Clearinghouses.) The slightest difference in the remaining characters will cause the titles to be considered unique (e.g., misspelled words or using a number spelled out vs. a numeric will cause otherwise duplicate titles to be considered unique). Duplicate checking is done only by title. For these reasons, title input to the ADR must be done accurately, and the tool must be used carefully, with full knowledge of its limitations.

The individual "Clearinghouse Activity/Exception Report" will list alphabetically by title all available information for each of the following categories:

(1) Newly Added Records

Within this group, records that contain a valid Clearinghouse prefix, but that do not have six numeric characters immediately following it, will be flagged with a pound sign (#) adjacent to the Clearinghouse number when added to the system, but will also appear in the ADR as entered.

(2) Records Flagged as First Time Duplicates

The first time that a record is detected as a potential duplicate it will appear in this report. This will occur when a new record is entered if it is a potential duplicate to any record then in the file or being added at the same time. Records also appear in this report if a newly entered record appears to be a potential duplicate to an old record and the old record had not been previously considered to be a potential duplicate.

(3) Records Changed

It is possible to change the data in the Pagination, Publication Date, and Disposition fields of an existing record. Records to be changed should be recorded on a separate ADR Input Form and identified as changes rather than new input. When this occurs, the changed record appears in this report (as well as in the ADR).

(4) Records Dropped (Routinely)

Records are dropped from the file after a one year retention period, at which time they appear in this report.

(5) Records Purged by Request

It is possible, by special request, to remove a record from the system. This is the only way, for example, to remove an incorrectly entered title. Records removed in this manner appear in this report. Contact the Acquisitions Department at the ERIC Facility if it is necessary to remove records. A purge request for a record that is not found in the system at the time the request is received, will be noted in a separate report.

Any of the above reports which do not have any entries for a given month will not be printed.

NOTE: If a document is entered into the ADR but then retained without further processing by the Clearinghouse for longer than 6 months, it should be re-entered into the ADR as a courtesy to other Clearinghouses who may acquire the document after its first ADR listing has "expired." Documents awaiting a release or a legible replacement copy may fall into this category.

D. SHIPPING

The following procedures cover the logging, packing, wrapping, labeling, and shipping of materials from the ERIC Clearinghouses to the ERIC Facility and from the Facility to the Clearinghouses and other components of the system. Special instructions concerning the shipment of materials from the Clearinghouses to the CIJE Contractor are also provided.

1. Clearinghouse Shipments to the Facility

a. Documents, Log Sheets, and OCR Forms, etc.

The principal materials sent from the Clearinghouses to the Facility are the accessioned documents intended for RIE announcement, ERIC Resume OCR Forms for each document, Log Sheets for each package, and Vocabulary Development Forms (VDF's) for each new Descriptor being recommended.

The OCR Forms should be shipped protectively, but will survive in normal Jiffy bags, with protective cardboard sheets top and bottom. Clearinghouses should group in one package the documents, resumes, and log sheets. VDF's should be mailed separately and marked "Attn: Lexicographer." Because Level 3 documents are not available from EDRS and are not sent to the Facility, the OCR Forms and reproduced copies of the Title Page and Contents Page (if one exists) for such accessions must be sent to provide the editors something to check against.

b. Information Analysis Products, Newsletters, Other Clearinghouse Publications

In addition to RIE-related material, the Clearinghouses must send the Facility (Attn: Reference Librarian) one copy of every Information Analysis Product (IAP), newsletter, or other Clearinghouse publication, for inclusion in the archival collection of Clearinghouse products maintained by the Facility.

c. Clearinghouse Input to the ERIC Administrative Bulletin (EAB)

Each month, Clearinghouses are asked to send any news item or announcements for the *ERIC Administrative Bulletin* to their contract Monitors. This information is compiled by Central ERIC and forwarded to the ERIC Facility by the 10th of the month for the next issue of the EAB.

2. Facility Shipments to Clearinghouses

The Facility distributes a wide variety of materials to the Clearinghouses:

- a. Documents acquired through the Facility's Acquisitions Program.
- b. Reproduced title pages of documents overlapping the scope of two or more Clearinghouses and bearing a Scope Overlap Label.
- c. Duplicates, rejects, and other types of documents removed from a Clearinghouse's RIE shipment for one reason or another.
- d. Vocabulary Status Reports, showing lexicographic action on VDF's.
- e. Labels Necessary to Process Actions.
 - Reproduction Release Labels (Level 1 and Level 2)
(EFF-62 and 63)
 - NIE Policy Disclaimer Labels
(EFF-61)

f. Forms

- ERIC Resume OCR Form (EFF-66)
- Vocabulary Development Form (EFF-73)
- Clearinghouse Accession Log Sheets (EFF-38)
- Acquisitions Data Report—Input Form (EFF-15)
- Reproduction Release (Individual, Blanket) (EFF-53 and 57)
- Document Transfer Form (EFF-70)
- NIE Document—Selection Report (EFF-71)

g. Support Publications

- *Title Index*
- *Acquisitions Data Report (ADR)*
- *Thesaurus (Working Copy)*
- *Source Directory*
- *Contract/Grant Number Index*
- *Clearinghouse to ED Number Cross-Reference List*
- *Report Number Index*
- *Source Postings and Statistics*
- *ERIC Acquisitions Arrangements List*
- *Identifier Authority List (IAL)*

h. Brochures (Typical)

- How to Use ERIC
- How to Start an ERIC Collection
- Submitting Documents to ERIC
- RIE and CIJE Subscription Blanks
- IAP Flyer

i. Single-Frame Resumes to Clearinghouses

j. Miscellaneous Distributions

- RIE (Complimentary)
- CIJE (Complimentary)
- Interchange
- *ERIC Information Analysis Products* (annual bibliography)
- *ERIC Processing Manual (Revisions)*
- *ERIC Administrative Bulletin (EAB)*
- Complimentary ERIC microfiche (for authors)
- NIE formal publications

Supplies of forms, labels, and brochures should be requested in specific quantities from the Facility's Document Control Department.

The frequency and number of copies of support publications is determined by Central ERIC. For information on the number of copies distributed to Clearinghouses and/or frequency of distribution, contact the Document Control Department.

In addition to the above, correspondence with the Clearinghouses on various matters is regular and voluminous.

3. Clearinghouse Accession Log Sheet Instructions

Every shipment of documents/resumes for RIE from the Clearinghouses to the Facility must be accompanied by a completed "Clearinghouse Accession Log Sheet" (Figure IV-8). Entries must be made in accession number sequence and the documents must be packed in the same sequence as logged. Clearinghouses must complete all parts of the form down to and including the box marked "Total (this page)":

- Clearinghouse Name;
- Date Logged;
- Signature of Logger;
- Total Accessions Logged on the Sheet and for each accession;
- Clearinghouse Accession Number;
- Brief Identification; Usually Author Surname, Sometimes Title;
- Level (i.e., 1, 2, or 3)
- Any Special Comments (Justification for Brief Document, IAP, etc.)

If only one Log Sheet is required for the shipment, indicate Page 1 of 1. If more than one is required, indicate the sheet number and the total sheets, e.g., Page 1 of 3, Page 2 of 3, Page 3 of 3. If more than one box is required for the shipment, the Log Sheets should be included in the first box and the boxes marked 1 of n, 2 of n, etc.

Upon receipt at the Facility, the shipment and Log Sheet are checked against one another. If both are correct, the documents/resumes go forward for pagination. Copies of the Log Sheets are retained at the Facility for about three months for possible use in reconciliation in case of a discrepancy.

4. Shipping Instructions

a. Packing

Containers or boxes used for shipping should conform to regulations and limitations recommended or imposed by the Postal Service. The following limitations on the dimensions and weight of packages are cited for reference, with the reminder that they are subject to change:

Dimensions: Not over 100 inches (length plus girth)
Weight: Seventy (70) pounds maximum

Containers should be strong enough to withstand normal handling. They should be water resistant to the extent that rain, spillage, and other such frequent occurrences will not damage the contents or undo the package. Tightly packed documents are their own best protection, so each container should be tightly packed, without using individual wrappings or envelopes on the documents. Empty space which cannot be avoided can be most economically filled with tightly packed crumpled newspaper. The

box used should not be overly large, but rather just large enough for the shipment.

b. Wrapping

Wrapping should be accomplished in accordance with Postal Service requirements. Paper packing tape should be used to adequately seal the package and avoid openings and interstices where other pieces of mail might lodge. Cellulose tape, wax, or other sealers should be avoided wherever postmark impressions are made (e.g., stamp area, flap intersections in the case of registered mail, etc.). If string or twine are used, they should be strong enough to do the job.

c. Labeling and Addressing

All packages must bear the complete names and addresses, including Zip Codes, of both sender and addressee. For the latest addresses of all network components, see the *ERIC Directory*. Labels should be securely affixed. Pre-printed labels may be used for consistency and convenience.

In the case of RIE material being shipped from a Clearinghouse to the Facility, the designation "ERIC MATERIAL" should appear on the label and on the left-hand corner of the labeled side of the package. If the shipment is composed of more than one box, each box should be marked to designate the proper sequence (e.g., 1 of 3, 2 of 3, 3 of 3).

d. Shipping Method

ERIC materials shipped from the Clearinghouses to the Facility via the Postal Service should be sent CERTIFIED mail unless otherwise directed. Commercial delivery services (such as United Parcel Service) may be used as long as the route involved is regularly served by the company. If a commercial service is used, the mode of transportation and handling most equivalent to CERTIFIED Mail should be selected.

e. Shipping Schedules

Shipping schedules for accessioned documents intended for RIE are established by Central ERIC and announced in the ERIC Master Schedule which is distributed annually by the ERIC Facility. The current Clearinghouse practice is to ship to the Facility every Friday whatever has been completed during the week. The Clearinghouses should make every effort to ship weekly in order to shorten the elapsed time between acquisition and announcement and to keep the workflow even throughout the system. There are occasionally extenuating circumstances which will prevent weekly

shipment, therefore, weekly shipment is not absolutely mandatory. If the Facility fails to receive a shipment from a Clearinghouse for two weeks in succession, however, it contacts the Clearinghouse to determine the cause of the abstention.

f. Miscellaneous

(1) EDRS Disposition of Original Documents

The disposition of original documents depends on the reproduction technique utilized by the ERIC Document Reproduction Service (EDRS). If paper copy reproduction is done via the microfiche, the original documents are not needed. However, if paper copy reproduction is done via the original document, then they must be retained by EDRS.

Beginning with the April 1971 RIE issue, ERIC microfiche were converted to the COSATI 98-frame standard from the earlier 60-frame standard. Paper copy reproduction prior to that issue is performed via the 60-frame microfiche; paper copy reproduction after that issue is currently done using the 98-frame microfiche. Under this system, original document retention in an archival "Case File," as was once required, is no longer necessary. Alternate dispositions, such as return to the Clearinghouses, are therefore possible. If a Clearinghouse should wish a specific accession to be returned, it should attach a note to this effect (addressed to EDRS) to the front of the document, and after filming, the document (with spine generally removed) will be returned to them by EDRS. Such requests should be the exception and not the rule; it is not intended that all documents should be returned in this way.

At the present time, EDRS stores the original documents for a 4-month period in case the microfiche quality control check discovers a document requiring re-filming. After 4 months the documents are discarded.

E. CIJE Input

1. Handling

The success of CIJE depends largely on quick announcement. To achieve this objective, the processing of the articles in a particular journal and the forwarding of the completed resumes to the Facility should take place as rapidly as possible. Three weeks is to be considered the *maximum acceptable elapsed time* under normal circumstances.

- Consistent with this schedule is rapid follow-up on late-arriving issues. However, since publication schedules are often erratic, e.g., many educational journals cease publication during the summer months, such follow-up should be done with advance knowledge of the particular journal's publishing pattern.

Each Clearinghouse is responsible for keeping the necessary serial records in order to ensure that all issues of a given journal for which they have responsibility are received and processed. If the records are adequate they will obviously prevent double processing. Responsibility for the duplicate checking of "one-shot" articles rests with the CIJE Contractor.

If a journal should cease publication, notification should be sent to the CIJE Contractor so that the name of the journal can be removed from the "Source Journal Index" in each issue. Similarly, any change in the title of a journal should be forwarded to the CIJE Contractor so that the "Source Journal Index" can be corrected.

Articles selected for announcement in CIJE are accessioned using a unique identifying number, with alphabetic prefixes already established for each Clearinghouse, as follows:

ALPHA PREFIX	NUMERIC SERIES	CLEARINGHOUSE/PROCESSOR	NOTE
AA*	500 000	CIJE Contractor	1969-1971 ERIC Facility 1972- CIJE Contractor
AC	500 000	Adult Education	Merged into CE in 1973
AL	500 000	Linguistics	Merged into FL in 1971
CE	500 000	Career Education	
CG	500 000	Counseling & Personnel Services	
CS	700 000	Reading and Communication Skills	
EA	500 000	Educational Management	
EC	500 000	Handicapped and Gifted Children	
EF	500 000	Educational Facilities	Merged into EA in 1970
EM	500 000	Educational Media & Technology	Merged into IR in 1974
FL	500 000	Languages and Linguistics	
HE	500 000	Higher Education	

-Continued-

ALPHA PREFIX	NUMERIC SERIES	CLEARINGHOUSE/PROCESSOR	NOTE
IR	500 000	Information Resources	
JC	500 000	Junior Colleges	
LI	500 000	Library and Information Sciences	Merged into IR in 1974
PS	500 000	Early Childhood Education	
RC	500 000	Rural Education and Small Schools	
RE	500 000	Reading	Merged into CS in 1972
SE	500 000	Science, Mathematics, and Environmental Education	
SO	500 000	Social Science/Social Studies Education	
SP	500 000	Teacher Education	
TE	200 000 700 000	Teaching of English	Merged into CS in 1972
TM	500 000	Tests, Measurement, and Evaluation	
UD	500 000	Disadvantaged	
VT	500 000	Vocational and Technical Education	Merged into CE in 1973

*AA = encompasses all journals that cannot be assigned to particular Clearinghouses.

Each Clearinghouse is responsible for keeping appropriate log records to prevent the use of any one Clearinghouse accession number more than once.

2. Shipping

CIJE materials should be shipped from the Clearinghouse to the Facility on a "journal-by-journal" basis. Each shipment must include:

- a. Journal Article OCR Form (EFF-66) (Rev. 12/79) (same form used for RIE resumes). Original copies should be sent.
- b. Clearinghouse Accession Log Sheet (EFF-38). Each journal issue should begin a new Log Sheet. This form is identical to that used for RIE input (see Figure IV-8). Care should be taken to fill in the "Journal Citation (CIJE Only)" block.

NOTE: The actual journal articles are not shipped.

All shipments of CIJE materials are to be labeled "ERIC Materials" and are to be transmitted via Certified Mail, or equivalent commercial carrier service when shipment size warrants. The OCR forms and Log Sheets should be shipped protectively, in normal Jiffy bags, with protective cardboard sheets top and bottom. If desirable, the Jiffy bag may be included with the weekly RIE shipment, making sure the bag is clearly marked "CIJE."

3. Facility Handling and Shipping

The Document Control Clerk records the date of receipt and the number of items received in each shipment.

The Facility scans the forms and then sends Oryx the resultant magnetic tape together with the forms for proofing purposes.

4. EJ Accession Number

The final EJ accession number is assigned to articles by the CIJE Contractor just prior to publication. It consists of the two-letter alpha prefix EJ, followed by six numerics, e.g., EJ 000 123.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 5 : CATALOGING

MAY 1982

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION V: CATALOGING

CATALOGING

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REFERENCE TOOLS USED IN THE CATALOGING PROCESS

The publications listed below are the primary reference tools of use in the cataloging process. The cataloging guidelines assume that Clearinghouse catalogers have both knowledge of and access to these publications. Because the introductory material appearing in each publication describes fully its frequency, format, and method of use, that information is not repeated here.

- ERIC Processing Manual (EPM)
- ERIC OCR Keying Manual
- Thesaurus of ERIC Descriptors (Working Copy), and Supplements
- Identifier Authority List (IAL), and Supplements
- Source Directory
 - Truncated Edition (Names Active Across Last 5 Years)
 - Monthly Cumulative Supplements
 - Archival Edition (All Names)
- Contract/Grant Number Index
- Report Number Index
- Clearinghouse Number to ED Number Cross-Reference List
- GPO Style Manual
- A Manual of Style (University of Chicago Press)
- Anglo-American Cataloguing Rules (AACR-2)
- COSATI (Guidelines for Descriptive Cataloging of Reports (PB-277 951)

CATALOGING

SUMMARY OF SIGNIFICANT RULES

The following rules apply to the cataloging of all data elements. The specific rules that apply uniquely to a given data element are provided in the individual section on that data element.

1. Catalog from the document in hand. (However, if the document is Level 3, research into sources of availability may be essential.)
2. The principal authorities that should be consulted to answer cataloging questions not covered by these guidelines are the following:
 - *Guidelines for Descriptive Cataloging of Reports. A Revision of COSATI Standard for Descriptive Cataloging of Government Scientific and Technical Reports.* (PB-277 951)
 - *Anglo-American Cataloguing Rules.* Second edition.
3. The principal authorities that should be consulted to answer questions of grammatical style and English usage not covered by these guidelines are the following:
 - *GPO Style Manual*
 - *A Manual of Style* (University of Chicago Press)
4. Do not hyphenate, slash, or dash at the end of a line.
5. The text of all fields should be entered in upper and lower case, as appropriate. Use only the 88 characters available in the ERIC Character Set, but do not use the Underline (_).
6. The Semicolon is used only as a subfield delimiter (to separate multiple Authors, Institutions, Descriptors, Report Numbers, etc., and to separate logical segments of certain fields, e.g., Journal name from volume/number data) in all fields except Title, Descriptive Note, Availability, and Abstract, where it can be used as a normal punctuation mark.
7. Certain data elements are mandatory and others are optional (i.e., conditional on their appearing in the document or journal article). Mandatory data elements must be cataloged for every record entered in the system.

8. Different volumes or parts of the same document should be accessioned in proper sequence and, if at all possible, should be input to the same issue of RIE.

A. INTRODUCTION

V. CATALOGING

A. Introduction

1. General

These guidelines for descriptive cataloging are intended for use by the ERIC Clearinghouses in preparing bibliographic data for the ERIC data base. They will also be of interest to users of the ERIC data base in that they describe various matters knowledge of which is essential in retrieval operations, e.g., the definition of each data element, where in the record certain information is stored, when each data element was initiated, how the data are structured, etc.

Cataloging is a complex function and the guidelines presented here are necessarily limited. For cataloging problems not detailed herein, catalogers should consult the following principal references (on which the ERIC guidelines are based):

- *Guidelines for Descriptive Cataloging of Reports. A Revision of COSATI Standard for Descriptive Cataloging of Government Scientific and Technical Reports.* Washington, D.C., Committee on Information Hang-ups, March 1978. 72p. (PB-277 951).
- *Anglo-American Cataloguing Rules.* Second Edition. Chicago, American Library Association, 1978. 620p.

For questions of general grammatical style and English usage, the cataloger should consult principally the latest editions of the GPO Style Manual and the University of Chicago Press' *A Manual of Style*.

The objective of descriptive cataloging is to provide a unique description for the document in hand, which will serve to distinguish it from all other documents. Since ERIC is a computerized system, the cataloging function simultaneously provides tags for the data the system collects. These tags later serve essential roles in various computerized operations such as the production of indexes, generation of abstract journals, computer searching, etc.

Traditional library cataloging deals primarily with monographs (books) and serials (journals)—the standard open literature production of the commercial publishing community. ERIC cataloging deals primarily with technical reports, conference papers, and similar fugitive, limited-distribution, non-commercial materials. The ERIC data elements have been selected to fit the literature it processes and they therefore include elements that are not normally treated by libraries, e.g., Report Numbers, Contract Numbers, Sponsoring Agencies, etc. For this reason, the ERIC cataloging guidelines were originally based on guidelines developed specifically for the report literature.

Because of the complexity of the report literature and the fact that it has always been regarded as having a limited life span, one of the fundamental rules of report cataloging has always been to catalog from the document in hand. Extensive investigation to find information not contained in the document, sometimes justified in the cataloging done by large research libraries, has rarely been seen as justified for the report literature. Information that may accompany the document (e.g., in the form of letters of transmittal) should, of course, be used if available (and kept with the document for the benefit of later editors). Also, if a document is obviously one of a series, of which other members have been entered in the system, it is appropriate to check the other members to ensure consistent treatment within the set. However, in general, the rule is to catalog from the document and to consider each field of data as a distinct entity, attempting to characterize that particular aspect of the document as best it can be on the basis of the information immediately available.

2. Data Entry

a. Transmitting Bibliographic Data from Clearinghouse to Facility

At one time, all cataloging data were prepared by the ERIC Clearinghouses on a single paper form and mailed to the ERIC Facility for keying, editing, and subsequent computer processing. As technology has advanced, the methods employed for the transmission of cataloging data have become more varied, e.g.:

- transmission on forms (OCR forms) that can be optically scanned (forms mailed)
- transmission from communicating word processor to communicating word processor (across telephone lines)
- transmission from minicomputer to word processor (or computer) (across telephone lines)
- transmission from microcomputer to word processor (or computer) (across telephone lines)
- transmission via computer-compatible magnetic tape (tapes mailed)

The data entry technology used by each ERIC Clearinghouse depends on the equipment available at that particular Clearinghouse. The ERIC Facility attempts to take advantage of new equipment as it is acquired by the Clearinghouses. In this environment, not all Clearinghouses follow exactly the same cataloging procedures. Some may be typing Optical Character Recognition (OCR) forms (on the basis of handwritten original forms); others may be entering cataloging data directly into their word processor for later direct telephonic transmission. With such differing data entry methodologies

all going on simultaneously, it is difficult to prepare a single unified set of data entry instructions. For this reason, Section IX of the EPM on "Data Entry" has been temporarily deferred as ERIC evolves toward a single data entry technique. Meanwhile, a separate document entitled the *OCR Keying Manual* remains the principal instructional manual in this area. Clearinghouses keying data for transmission via methodologies other than the OCR approach should still follow this manual in tagging and otherwise structuring their data for input to the Facility.

Similarly, no matter what the data entry methodology employed, the cataloging rules described in this section for the individual data elements remain the same.

b. Rules for Keying Bibliographic Data

The current ERIC Resume OCR Form (EFF-66) (Figure V-1) is an 8½" x 11" blank form designed for ease of use with optical scanners. It has a border within which all data must reside. It has a "starting position" in which the very first data element, the Clearinghouse Accession Number, should begin and on which the scanner initiates its reading of the form. On the back of the form is a summary set of cataloging instructions together with typical examples of each data element. The ERIC Resume OCR Form must be typed using a Selectric typewriter set for five lines to the inch (vertically) and ten characters to the inch (horizontally) i.e., ten pitch. The standard OCR-A typing element must be used to ensure that the scanner can recognize the characters. Corrections can be made in a variety of ways including the Selectric's self-correcting mechanism, use of the character-erase ("blob"), use of the character-deletion/word deletion/line-deletion capabilities ("hooks"), and the ability to replace any given line or field with correction data discovered after the initial keying. These matters are covered in detail in the *ERIC OCR Keying Manual*. If non-OCR data entry is being used (e.g., a word processor) then the instructions that pertain uniquely to OCR do not, of course, apply. However, the following rules would apply to all types of keying.

- Begin data entry immediately after the keyword/tag. Do not leave blank spaces between keyword/tag and the actual data. Begin each new data element on a separate line.
- Use only characters available in the ERIC character set (Figure V-2).
- Do not hyphenate, slash, or dash at the end of a line. The computer system identifies words by the occurrence of a space, and it automatically inserts a space after the last character in each line (i.e., a carriage return generates a space), so if "re-" ends a line and "trieve" begins the next, the data appears in the record as "re- trive."

- Keep all data inside the border.
- Use the semicolon (;) only as a delimiter (i.e., subfield separator) in all fields except Title, Availability, Descriptive Note, and Abstract. Within these four fields, the semicolon may be used in normal fashion.

Figure V-3 is a sample of completed ERIC OCR Forms, one each for RIE and CIJE.

3. Mandatory vs Optional Data Elements

Certain data elements are mandatory, and records are not permitted to enter the ERIC Master Files unless they exhibit these data elements. Other data elements are "optional" or "conditional" in that they should be cataloged when available on the document, but they are not always available. There are some differences between RIE and CIJE in this regard. For example, the Title field is mandatory for both RIE and CIJE, but the Journal Citation field is mandatory solely for CIJE.

Figure V-4 lists all of the data elements currently cataloged by ERIC and indicates for each whether it is an RIE or CIJE element, mandatory or optional, Clearinghouse input or central Facility input. Catalogers may wish to use this figure as a checklist to ensure completeness of cataloging.

<u>Data Elements Mandatory for RIE</u>	<u>Data Elements Mandatory for CIJE</u>
Clearinghouse Accession Number	Clearinghouse Accession Number
Publication Date	
Level of Availability (at EDRS)	
Pagination	
Title	Title
Publication Type	Publication Type
Language	Language
Descriptors	Journal Citation
Abstract	Descriptors

4. Clearinghouse Input vs ERIC Facility (or CIJE Publisher) Input

Most of the cataloging data is generated by the Clearinghouses and simply edited by the ERIC Facility (or CIJE Publisher). However, of the 24 total data elements currently cataloged, four are the responsibility of the central support contractors for RIE and CIJE:



Resume OCR Form

Date

Date _____

□ NEW RESUME

ORIE OCHJE

CORRECTIONS ONLY PAGE ____ OF ____

Prepared By

ANSWER

CORRECTIONS ONLY PAGE ____ OF ____

Typewriter ID No.

Keywords

ALIGN FIRST CHARACTER IN BOX

1

CH
PDAT
LEVEL
PAGE
AUTH
TITLE
INST
SPON
CONT
GR
REPO
PUBTYPE
NOTE
AVAIL
JNL
LANG
GEO
GOV
DESC
IDEN
ABST

Substitution Characters

ERIC	OCR
[{ {
]	} }
-	? ?
>	.GT.
<	.LT.
({
)	}
#	H
-	:

DO NOT TYPE BELOW THIS LINE

EFF-66 (Rev. 3/80)

FIGURE V-1: ERIC RESUME OCR FORM (BLANK)

ERIC RESUME
Summary Instructions

FIELD NAME	KEYWORD	MAX. CHAR. PER ENTRY	MAX. ENTRIES	TYPICAL ENTRY(IES)	NOTES
ERIC Accession Number	--	8(FL)	1	ED065432	No entry. Supplied by Facility.
Clearinghouse Accession Number	CH::	8(FL)	1	TM015432	Assigned by Clearinghouse.
Publication Date	PDAT::	7	1	14May73	Use ONLY following formats: 14May73, May73, 73, or [73]
Level of Availability (At EDRS)	LEVEL::	1(FL)	1	1	Level 1 - MF & PC Level 2 - MF Only; Level 3 - Not available EDRS
Pagination	PAGE::	10	1	10	No Entry (Except for Level 3 items) Supplied by Facility
Author(s)	AUTH::	50	2	Smith, John J., Doe, R R Jones, B W., And Others	One or two authors.
Title	TITLE:	500	1	Indians in Maine	Three or more authors. Include subtitle, translated title, etc
Institution Code (Corporate Source)	INST::	8(FL)	4	BBB08456	See <u>Source Directory</u>
Institution Name	--	200	4	Heuristics, Inc., Dedham, Mass	See <u>Source Directory</u>
Sponsoring Agency Code	SPON::	8(FL)	4	BBB05495	See <u>Source Directory</u>
Sponsoring Agency Name	--	200	4	Army Library, Washington, D C	See <u>Source Directory</u>
Contract Number	CONT::	25	2	400-76-0045	
Grant Number	GR::	25	2	NIE-G-74-0025	
Report Number	REPNO::	40	4	PB-178 441, OE-12047	
Publication Type	PUBTYPE::	3	3	090: 160	See ERIC Processing Manual for Codes. 080 supplied automatically for all EJ's.
Descriptive Note	NOTE::	300	3	For related documents see...	
Availability	AVAIL::	300	1	Harper & Rowe, 49 E. 33rd St. N Y 10016 (\$8.50)	OTHER than EDRS DO NOT enter "Available from .", etc
Journal Citation	JNL::	50	2	Science, v27 n12 p122-137 May 1979	
Language of Document	LANG::	100	5	English, French	Semicolon after Journal Name
Geographic Source of Document	GEO::	300	2	U S, Indiana	No entry when only English.
Governmental Status of Document	GOV::	150	1	Federal	See <u>ERIC Processing Manual</u> for Geographic Names
Descriptors	DESC::	50	20	*Gifted, Grade 7	See <u>ERIC Processing Manual</u> for Governmental Names
Identifiers	IDEN::	50	10	*Sesame Street	5 to 10 terms recommended. Asterisk (*) 1 to 6 major terms for printed index.
Abstract/Annotation	ABST::	1400	1	The teaching of a dialect modification	0 to 5 terms recommended. No more than two (2) asterisked (*) for RIE Index.
					RIE: About 200 words CIJE: About 50 words

Note: Fixed length data fields are indicated by (FL); all other fields are variable in length. The maxima cited above for variable length fields are practical limits in accordance with the *ERIC Processing Manual* cataloging rules, NOT necessarily those of the computer system, which frequently includes large safety factors.

NOTE:

Mandatory for RIE: CH, PDAT, LEVEL, PAGE, TITLE, PUBTYPE, LANG, DESC, ABST
Mandatory for CIJE: CH, TITLE, PUBTYPE, LANG, JNL, DESC, ABST (i.e. Annotation)

FIGURE V-1: ERIC RESUME OCR FORM (BLANK) (PAGE 2)

ALL ALPHABETICS	- A-Z (UPPER CASE)
ALL ALPHABETICS	- A-Z (LOWER CASE)
NUMERICs	- 0-9
SPECIAL CHARACTERS	- (LISTED BELOW)

& AMPERSAND	> GREATER THAN
' APOSTROPHE	< LESS THAN
* ASTERISK	- HYPHEN
BLANK SPACE	(PARENTHESIS (LEFT)
[BRACKET (LEFT)) PARENTHESIS (RIGHT)
] BRACKET (RIGHT)	% PERCENT
:	. PERIOD
,	+ PLUS SIGN
-- DASH (TWO HYPHENS)	# POUND SIGN
\$ DOLLAR SIGN	? QUESTION MARK
= EQUALS	" QUOTATION MARK
! - EXCLAMATION POINT	; SEMICOLON
	/ SLASH, VIRGULE

FIGURE V-2: ERIC CHARACTER SET



Resume OCR Form

Date

NEW RESUME
ORIE ORIE

Prepared By

CORRECTIONS ONLY PAGE ____ OF ____

Keywords

ALIGN FIRST CHARACTER IN BOX

Typewriter ID No.

CH
PDAT
LEVEL
PAGE
AUTH
TITLE
INST
SPON
CONT
GR
REPNO
PUBTYPE
NOTE
AVAIL
JNL
LANG
GEO
GOV
DESC
IDEN
ABST

CH:::AAB54321
TITLE:::Career Education for Women. Final Report, 1981-1982.
AUTH:::Smith, John D., Jr.; Jones, Mary Jane
INST:::BBBB98765=Central Univ., Chicago, IL.
SPON:::National Research Foundation, Washington, DC.
PDAT:::14May82
LEVEL:::3
PAGE:::14
LANG:::English; Spanish
PUBTYPE:::143; 110
REPNO:::CU-TR-82-5
CONT:::NRF-C-001-04964
GEO:::U.S.; Illinois
GOV:::Federal
AVAIL:::Superintendent of Documents, Washington, DC 20402
{\$6.50}.
NOTE:::Paper presented at the National Conference on Career Education {3rd, Chicago, IL, January 13-15, 1982}.
DESC:::Career Guidance; Career Planning; Careers; *Demand Occupations; *Employment Opportunities; Females; Labor Force; Labor Market; *Labor Needs; Occupational Aspirations; Occupations; *Working Women
IDEN:::Consortium of States; *National Occupational Competency Testing Institute
ABST:::Women's opportunities for employment will be directly related to their level of skill and experience but also to the labor market demands through the remainder of the decade. The number of workers needed for all major occupational categories is expected to increase by about one-fifth between 1980 and 1990, but the growth rate will vary by occupational group. Professional and technical workers are expected to have the highest predicted rate {39%}, followed by service workers {35%}, clerical workers {26%}, sales workers {24%}, craft workers and supervisors {20%}, managers and administrators {15%}, and operatives {11%}. This publication contains a brief discussion and employment information concerning occupations for professional and technical workers, managers and administrators, skilled trades, sales workers, clerical workers, and service workers. {Author/SB}

Substitution Characters

ERIC OCR

{ {{
} }}?
.GT.
.LT.
{ }#

DO NOT TYPE BELOW THIS LINE



Resume OCR Form

Date
_____ NEW RESUME
ORIE OCIEPrepared By
_____ CORRECTIONS ONLY PAGE ____ OF ____

Keywords

ALIGN FIRST CHARACTER IN BOX

CH
PDAT
LEVEL
PAGE
AUTH
TITLE
INST
SPON
CONT
GR
REPNO
PUBTYPE
NOTE
AVAIL
JNL
LANG
GEO
GOV
DESC
IDEN
ABST

OH::AA987654
TITLE::Snow Survival Strategies of the Plains Indians.
AUTH::Brown, John A.
LANG::English; French
PUBTYPE::060; 171
AVAIL::UMI
JNL::Indian History; {Native American Survival Techniques}
v7 n2 p3-11 Dec 1982
DESC::*American Indians; *Foods Instruction; Medicine;
*Outdoor Education; *Plant Identification; *Safety
IDEN::Fires; Snow; *Survival Skills {outdoor}
ABST::A basic review of the following techniques: {1} building
a shelter; {2} making a fire; {3} finding and keeping food;
{4} safety and medicine; {5} orientation to directions; and
{6} aids in traveling in the country. {RTS}

Substitution Characters

ERIC OCR
{ {
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< .LT.
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d
- ::

DO NOT TYPE BELOW THIS LINE

EFF-66 (Rev. 3/80)

FIGURE V-3B: ERIC RESUME OCR FORM (COMPLETED - CIJE RECORD)

- ERIC Accession Number (ED/EJ Number)
- Issue (of Abstract Journal)
- EDRS Price Code (RIE only)
- Pagination (Level 1 and 2 Documents) (RIE only)

Figure V-4, which is a total list of data elements, includes these four and designates the responsible unit in each case.

5. Organization of Data Element Descriptions

Each data element is described and its guidelines established in a standard format consisting of five parts: Profile, Typical Entry, Text, Summary of Significant Rules, Examples.

Profile: Provides a quick capsule of basic information about the data element: its official name; the tag used during data entry to identify the data to the computer program; the decimal number identifying the field on tapes containing this data; whether the field contains alphabetic, numeric, or special character data; whether the field is mandatory or optional; whether the data can be subfielded (i.e., whether it can have multiple entries, as with authors, Descriptors, etc.); field length information (to provide the cataloger with useful information pertaining to actual field maximum/minimum/average lengths); what files (RIE or CIJE) the data element is used in.

Typical Entry: Provides an example of the data element as it should be keyed for entry.

Text: Provides a narrative text treating the cataloging of the data element in complete detail. All explanations and justifications that can only be handled by a narrative are provided here.

Summary of Significant Rules: All the rules explicit or implicit in the text or the examples are itemized in list form.

Examples: Examples are provided of all the significant variant forms the data element can take. Each form is labeled. This section is designed for rapid ready reference. In many cases, a cataloger faced with a problem, can solve that problem by referring to an example without bothering to read all the text explaining or justifying the approach.

			Responsibility		RIE		CIJE	
			Clearinghouse (CH)	Central Facility	Mandatory	Optional	Mandatory	Optional
1				X	X		X	
2				X	X		-NA-	
3				X	X		-NA-	
4				X	X		-NA-	
A	Central Facility Input	ERIC Accession Number (ED/EJ) Issue (of Abstract Journal) EDRS Price ① Pagination② Level 1 and 2 Documents					-NA-	
B		Level 3 Documents Clearinghouse Accession No. Publication Date Level of Availability Title Journal Citation Language (1979-) Publication Type (1974-) Descriptors Abstract	X		X		X	-NA-
5			X		X		X	-NA-
6			X		X		X	-NA-
7			X		X		X	-NA-
8			X		X		X	-NA-
9			X		X		X	-NA-
10			X		X		X	-NA-
11			X		X		X	-NA-
12			X		X		X	-NA-
13A	CH Input (Mandatory Elements)	X(English) ④ X (080) ⑤				X		
B		-- Annotation Personal Author Institution Sponsoring Agency Report Number Contract Number Grant Number Descriptive Note Availability Geographic Source (1979-) Governmental Status (1979-) Identifiers Target Audience (1984-)	X			X		X
14			X			X		X
15			X			X		X
16			X			X		-NA-
17			X			X		-NA-
18			X			X		-NA-
19			X			X		-NA-
20			X			X		-NA-
21			X			X		-NA-
22			X			X		-NA-
23			X			X		-NA-
24			X			X		-NA-
25	CH Input (Optional Elements) (To be documented when applicable)		X			X		X

FIGURE V-4: ERIC DATA ELEMENTS
(Showing Responsibility for Each, File in Which Used, and Mandatory/Optional Status)

NOTES

- ①. EDRS Price Code
 - Generated by computer system automatically; based on data in Level and Pagination fields.
- ②. Pagination
 - Clearinghouses provide pagination only for Level 3 documents (where no actual document is sent to the Facility). Facility performs centralized pagination function on all Level 1 and 2 documents.
- ③. Publication Date (CIJE)
 - Derived by CIJE computer system automatically from Journal Citation field (last component).
- ④. Language (English)
 - "English" inserted by computer system as default option when no language entered. Data element initiated in 1979.
- ⑤. Publication Type (080)
 - Journal Article (PUBTYPE 080) inserted by CIJE computer system automatically in all CIJE records. Data element initiated in 1974.
- ⑥. Availability (CIJE)
 - "UMI" expanded by CIJE computer system automatically to "Reprint: UMI".
- ⑦. Descriptive Note
 - CIJE use of this data element initiated January 1984.

FIGURE V-4: ERIC DATA ELEMENTS (Continued)

**B. RULES FOR SPECIFIC DATA
ELEMENTS/FIELDS**

CENTRALIZED INPUT

ERIC ACCESSION NUMBER

V.B.1

PROFILE

Data Element/Field	- ERIC Accession Number
Data Entry Tag	- ACC::
Field ID Number (Tape)	- 16
Character Set	- Alphabetic, Numeric
Mandatory/Optional	- Mandatory
Subfields Permitted	- No
Field Length	- 8 (fixed length)
Files	- RIE and CIJE

TYPICAL
ENTRY (RIE)

ACC::ED123456

TYPICAL
ENTRY (CIJE)

ACC::EJ654321

The ERIC Accession Number (ED or EJ) is computer-assigned during final processing at the ERIC Facility (or the CIJE Publisher) and only after all duplicates, rejects, and other removals have been accomplished. This ensures an unbroken "gapless" sequence of accession numbers in the final product.

For this reason, this field should be left blank on all records transmitted to the ERIC Facility.

The ERIC Accession Number serves several purposes:

- an address tag for computer storage and retrieval.
- a physical location address for shelf storage of documents and microfiche.
- an index-to-resume connector for use in the indexes of announcement media.
- an order number for acquiring microfiche or paper copies of documents from EDRS (ED-only) or reprints from UMI (EJ-only).

The Accession Number prefix for RIE is an "ED," standing for "ERIC Document" or "Educational Document." The Accession Number prefix for CIJE is an "EJ," standing for "ERIC Journal."

A complete list of all ERIC Accession Numbers assigned to date, organized by publication by month, appears as Appendix D in the *ERIC Tape Documentation*.

SUMMARY OF SIGNIFICANT RULES

1. The ERIC Accession Number is assigned to the document or journal article by the ERIC Facility (or CIJE publisher) as one of the last steps in computer processing and after all duplicates, rejects, and other removals have been made. This ensures a "gapless" sequence of numbers. This number is not assigned by the Clearinghouses.
2. The ERIC Accession Number is entered in the computer file in packed form (e.g., "ED123456"). However, the customary way of printing the number for ease of human use, is as follows: "ED 123 456" (as used in RIE citations) or "ED-123456" (as often used in bibliographies).
3. RIE Accession Numbers are prefixed with an "ED." CIJE Accession Numbers are prefixed with an "EJ."
4. ED Accession Numbers are assigned sequentially and without gaps. If, after publication, a given accession is found to be a duplicate of a prior accession, or if a valid request is made to withdraw the accession from circulation, the record is not completely expunged from the file, but is instead "skeletonized" to a record containing only title and explanatory note (see EPM, Section X).

ISSUE (OF ABSTRACT JOURNAL)

V.B.2

PROFILE

Data Element/Field	- Issue (of Abstract Journal)
Data Entry Tag	- ISS::
Field ID Number (Tape)	- 43
Character Set	- Alphabetic, Numeric
Mandatory/Optional	- Mandatory
Subfields Permitted	- No
Field Length	- 8 (fixed length)
Files	- RIE and CIJE

TYPICAL ENTRY (RIE)

ISS::RIEJAN82

TYPICAL ENTRY (CIJE)

ISS::CIJJAN82

NOTE - This data element is not cataloged by the ERIC Clearinghouses. It is inserted into the RIE and CIJE records by the ERIC Facility and CIJE Publisher, respectively.

This field contains data identifying the RIE or CIJE journal issue in which the record was originally announced.

The field is fixed in length at 8 characters and has traditionally been constructed in Journal (3) - Month (3) - Year (2) format, as shown in the "Typical Entries."

EDRS PRICE CODE

V.B.3

PROFILE

Data Element	- EDRS Price Code
Data Entry Tag	- None (Generated by computer from Level and Pagination data)
Field ID Number (Tape)	- 37
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Mandatory) CIJE (Not Used)
Subfields Permitted	- No
Field Length (Experience)	- 33 (Min.); 62 (Max.); 38 (Av.)
Files	- RIE only

TYPICAL ENTRIES
(RIE Only)

Level 1	EDRS Price - MF01/PC03 Plus Postage.
Level 2	EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
Level 3	Document Not Available from EDRS.

NOTE: This data element is not cataloged by the ERIC Clearinghouses.

The EDRS Price Code field is not entered by either the ERIC Clearinghouses or the ERIC Facility. The contents of this field are generated by the computer system on the basis of data contained in the Level and Pagination fields. The Level determines the format of the statement (as shown in the "typical entries"). The Pagination determines the specific code(s) (e.g., MF01, PC03, etc.) inserted into the statement. The codes increase with increases in document size, according to the graduated table shown opposite. The meaning of the codes (in dollars and cents), and hence the table, changes whenever EDRS announces a price change. However, the codes themselves do not change and the data on the magnetic tape Master File therefore remain valid.

ERIC PRICE CODES			
PAPER COPY			
CODE	PAGINATION	PRICE	
PC 01.....	1 - 25	2.00	
PC 02.....	26 - 50	3.65	
PC 03.....	51 - 75	5.30	
PC 04.....	76 - 100	6.95	
PC 05.....	101 - 125	8.60	
PC 06.....	126 - 150	10.25	
PC 07.....	151 - 175	11.90	
PC 08.....	176 - 200	13.55	
PC 09.....	201 - 225	15.20	
PC 10.....	226 - 250	16.85	
ADD \$1.65 FOR EACH ADDITIONAL 25 PAGES OR FRACTION THEREOF			
MICROFICHE			
CODE	PAGINATION	FICHE	PRICE
MF 01	1-480	1-591
MF 02	481-576	6	1.10
MF 03	577-672	7	1.29
MF 04	673-768	8	1.48
MF 05	769-864	9	1.67
MF 06	865-960	10	1.86
ADD \$0.19 FOR EACH ADDITIONAL MICROFICHE (1-66 PAGES)			

FIGURE V-5:
ERIC PRICE CODES
(CONVERSION TABLE)

PAGINATION

V.B.4

PROFILE

Data Element/Field	- Pagination
Data Entry Tag	- PAGE::
Field ID Number (Tape)	- 39
Character Set	- Numeric
Mandatory/Optional	- RIE (Mandatory)
	Level 1 & 2 - ERIC Facility
	Level 3 - Clearinghouses
	CIJE (Not Used)
Subfields Permitted	- No
Field Length (Experience)	- 1 (Min.); 10 (Max.)
Files	- RIE only

TYPICAL
ENTRY
(RIE ONLY)

PAGE: :1542

Pagination in RIE is not calculated according to normal library rules, but is instead equivalent to the number of microfiche frames required to film the document. The pagination number is used by the RIE computer system to determine how many microfiche will be produced for each document. Since the total number of fiche for each accession is indicated on every fiche (e.g., "Card 1 of 5," etc.) and the number of total microfiche frames determines the EDRS microfiche and paper copy prices, accuracy in page counting is essential.

In order to achieve the needed accuracy and consistency, the pagination of Level 1 and Level 2 documents (i.e., those available from EDRS) has been centralized at the ERIC Facility. The detailed instructions that follow for Level 1 and 2 documents are, therefore, of two kinds:

- (1) instructions for the Clearinghouses as to how to arrange and prepare documents for pagination and filming;
- (2) instructions for the ERIC Facility as to how to number stamp the various kinds of pages it receives from the Clearinghouses.

Clearinghouses are responsible for document preparation (see also Section V.C), but should subsequently forward Level 1 and 2 documents to the ERIC Facility without cataloging the Pagination data element.

PAGINATION

However, in the case of Level 3 documents (i.e., those not available from EDRS), where the Clearinghouses do not normally send a document to the ERIC Facility, it is essential that the Clearinghouse catalog the document's pagination. Pagination for Level 3 documents can be determined in accordance with normal cataloging rules. Level 3 documents are not microfilmed and sold by EDRS and hence the pagination need not equate exactly with the number of microfiche frames required to film the item.

Detailed Procedures for Arranging and Paginating Level 1 and 2 Documents

Pagination for Level 1 and 2 documents is not simply the number of sheets of paper or sides with printing. It is, instead, defined as the number of microfiche frames required to photograph the entire document, which is frequently another number entirely. Therefore, special procedures must be followed to determine pagination, as follows:

- Number Stamping (ERIC Facility Function)

All pages, or portions of pages which will become microfilm images, will be sequentially number-stamped, using a Bates Numbering Stamp, Style E, or equivalent device. The numbering machine should have numerals approximately one-quarter inch ($\frac{1}{4}$ ") high, and should have a capacity of at least 4 digits. If all pages of the document are 8 $\frac{1}{2}$ " x 11" or smaller, each page will be number-stamped once, preferably at the bottom center of the page.

- Single Frame Resume Allowance (ERIC Facility Function)

Since the first page of a microfiched document is always the Single Frame Resume produced at the ERIC Facility, stamping will begin by numbering the first filmable page of the document (title page or cover) with the number 2. With this procedure, the number of the last page stamped on the document will then be the number of actual microfiche frames that will be required of EDRS.

- Valid Pages vs Invalid Pages (Clearinghouse Function)

All printed pages, including covers, prefaces, title pages, frontispieces, indexes, pocket materials, etc., are to be arranged in the sequence in which they are to be number-stamped and microfilmed. Covers and/or title pages are the first pages of a document to be filmed. Where these two pages are identical to one another, as sometimes occurs, one should be considered unnecessary and deleted. In the cases of pages that bear some small amount of printed material (e.g., a logo, a heading, a tab, etc.), but that are essentially blank, a judgment must be rendered as to whether the fragmentary material on the page is useful for the user or whether it is inconsequential. A page must, in other words, be classed as "printed" or "blank." Only the former is filmed.

- Blank Pages (Clearinghouse Function)

Blank pages, occurring occasionally in documents where the pages are normally printed front and back, are not to be number-stamped or filmed (even if numbered in the original document). On each blank page, the following legend should be added in letters approximately one-quarter inch ($\frac{1}{4}$ "") high:

BLANK PAGE
DO NOT FILM

In order to avoid bleedthrough, do not use felt markers for adding this legend. A rubber stamp, or a sticker, with the letters in a color other than black is recommended.

Note that this instruction does not apply to documents that through their entire length are printed on one side of the page only. The page number stamping process will suffice in such patterned cases to communicate filming instructions to EDRS.

- Missing or Deleted Pages (Clearinghouse Function)

If one or more pages are missing from the document as submitted (and as selected), either because the missing page(s) is (are) unobtainable, or because they are copyrighted, the Clearinghouse should insert in the document, at each point in the document where a gap occurs, a sheet carrying a legend in the following format:

PAGE(S) WAS (WERE) MISSING
(REMOVED) FROM THIS DOCUMENT PRIOR TO
ITS BEING SUBMITTED TO THE ERIC DOCUMENT
REPRODUCTION SERVICE.

This action will usually be taken for groups of pages containing matters of substance, the absence of which should be brought to the attention of the user.

- Wrong-Reading Pages (Text Parallel to the Long Dimension)
(ERIC Facility Function)

Generally, documents are made up of pages designed to be "right-reading" for the user, in the sense that they can be read immediately as the document opens, without adjustment of the orientation of the page.

PAGINATION

In most cases, the text of such right-reading pages is parallel to the short dimension. Such a page is filmed in the same orientation as it is bound and, therefore, becomes right-reading in the microfiche also.

Occasionally a document contains pages with text oriented at variance with the regular pages; this text is usually parallel to the long dimension and is "wrong-reading" in the document in the sense that the reader must turn the document 90 degrees to properly read the text. Wrong-reading frames on a microfiche are difficult for the user in that most standard equipment does not permit the platen holding the fiche to be turned 90 degrees.

ERIC's filming policy is that all pages will be made right-reading on the ERIC microfiche, as a convenience to microfiche users (so that they don't have to tilt their heads sideways to read the resultant image). In those cases where a page becomes oversize, e.g., 11" x 8½" when turned for filming, the paginator must follow the instructions for "Oversize Pages."

• Oversize Pages

An "Oversize Page" is defined as any page over 8½" in width or 11" in height. There are four possible techniques for handling oversize pages and the document preparer must select and use one of the following techniques in order to make the document ready for filming. The techniques are listed roughly in order of preference.

—Document Preparation (Note: This is a Clearinghouse function)

In many cases, a page that is oversize can be reduced, re-mounted, trimmed, cut, re-typed, or otherwise prepared so that the text it contains is shifted to one or more 8½" x 11" pages. Where this can be accomplished, it is the preferred solution in that it permits the filer to proceed at maximum speed and results in perfectly standard fiche which are easiest for the user to read. Document preparation of this type, which is a responsibility of the ERIC Clearinghouses, can involve a lot of work and is usually best resorted to for individual problem pages rather than entire documents. A document in which all or many pages present a problem is usually amenable to one of the other techniques.

—Increased Reduction Ratio (Up to 29X)

Legal-size documents (8½" x 14", and others up to 10" x 14"), which are right-reading, can be filmed in one frame by EDRS by resorting to a lens with a greater reduction ratio (29X is used for this purpose). Therefore, documents of this size do not need to be paginated any differently from normal-sized (8½" x 11") documents.

This reduction ratio change is done only for entire documents; it is not done for isolated legal size pages contained in regular-size documents (in which case one of the other techniques must be used).

In addition, it should be noted that small type (e.g., 6 point) may, at 29X, be reduced beyond the point of readability on regular microfiche readers and in paper copy reproductions. The combination of very small type and legal size may, therefore, prevent filming at the greater reduction ratio, compelling the document preparer to resort to other techniques.

—Double-Framing

All document pages oriented in a "wrong-reading" position in the document itself, will be filmed in a "right-reading" position on the ERIC microfiche. In order to accomplish this, the page will be filmed so as to occupy a combination of one full frame, the border area normally between frames, and part of a second frame. The maximum page size that can be handled in this fashion is normally 17" (width) x 11" (height), with a standard 24X reduction. Should the entire document be "wrong-reading" and oversize, so that a combination of 29X reduction and double-framing is possible, the maximum document size that could be handled is theoretically 17" (width) x 14" (height). These would be unusual dimensions for an entire document. Double-framing affects the page-stamping operation in the following way. Wrong-reading pages will have to be stamped with two page numbers in order to indicate that they occupy two frames. To avoid confusion, these numbers should, if possible, be stamped on the bottom left and right corners of the page, respectively, as shown in the diagram that follows (Figure V-6).

Please note that the double-framing technique can also be used to film documents that are simply odd-sized, i.e., the document is produced intentionally with its width exceeding its height (and 8½"). Note that a page must only be double-framed on microfiche when the text (not the paper) exceeds 8½" in width.

EDRS turns any double-framed pages to their original orientation (i.e., "wrong-reading") when making reproduced paper copies. This means the resulting copy is oriented the same way as the original document was when issued and therefore blowbacks can be read with no difficulty. Consequently, documents with significant numbers of "wrong-reading" or wide (> 8½") pages may still be entered at Level 1.

—Overlapping Images

If an oversize page cannot be "prepared" so as to fit on one or more independent normal-sized 8½" x 11" pages, if it cannot be encompassed via the double-framing technique (up to 17" wide by 14" high), and if it is not part of an entire legal-size document (up to 10" x 14"), then the only technique remaining is to film the page via a series of overlapping images.

—Tall Pages

Pages (right-reading) on which the printed copy exceeds 11" in height, and which are isolated and not part of a consistently legal-sized document, must be filmed as a series of two or more overlapping pages, and should be number-stamped as shown in Figure V-7(A), with the number preferably centered at the top and bottom of each frame.

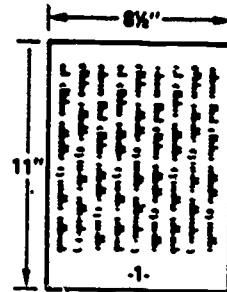
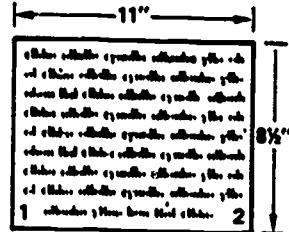
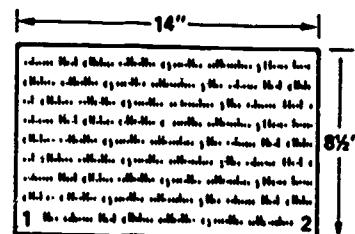
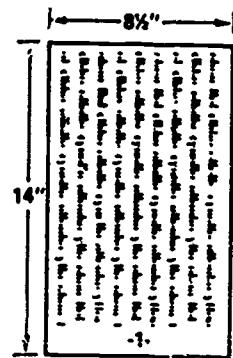
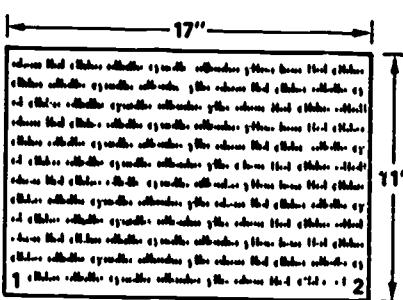
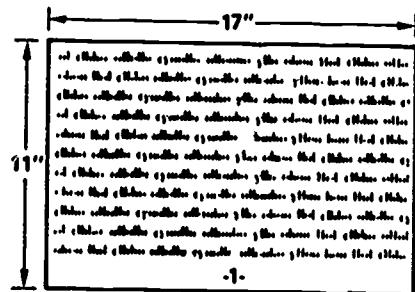
—Wide Pages

Pages (both right- and wrong-reading in original document) over 17" in width, which cannot be filmed as one intact double-framed page, must be filmed as a series of overlapping pages. They should be number-stamped as shown in Figure V-7(B), with the page numbers roughly centered at the base of each frame.

—Foldouts (Both Tall and Wide At Same Time)

Foldouts which exceed 17" in width and 11" in height simultaneously, and which cannot be converted, via document preparation, into two or more independent frames of the 8½" x 11", 17" x 8½", or 17" x 11" variety, must be filmed as a matrix of overlapping pages, as shown in Figures V-7(C) and (D).

Number-stamping should proceed left to right in accordance with Figure V-7(D), with the numbers for the top row of images in the top margin, approximately centered in the image areas, and those for the bottom row in the bottom margin, in similar fashion. In the middle row(s), the page numbers of the extreme left and right images should be placed in their respective margins, as shown in Figure V-7(D). Since such foldouts are usually drawings or flowcharts, it is usually possible to find a place for the number, in each interior image area, in a location which does not interfere with the information on the page. Almost anywhere in the image area is acceptable, except that the overlap areas should be avoided in order to minimize the chance of confusion if the same number is filmed twice. If space cannot be found for image numbers in interior frames, they may be omitted, provided that the correct numbers for the first and last images in each row appear in their respective margins.

DOCUMENT ORIENTATIONNORMAL SIZE PAGEFILMING ORIENTATIONLEGAL SIZE PAGEFOLD-OUTOVERSIZE
(IN BOTH DIMENSIONS)

**NOTE: 29X AND
DOUBLE-FRAMING
MAY BE USED ONLY
IF ENTIRE DOCUMENT
IS SAME SIZE**

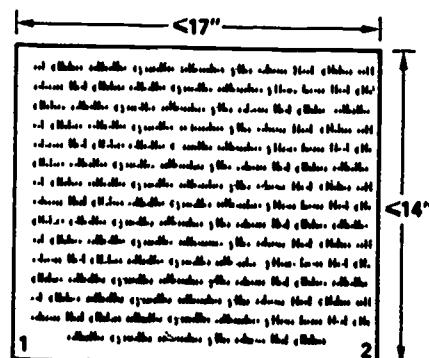
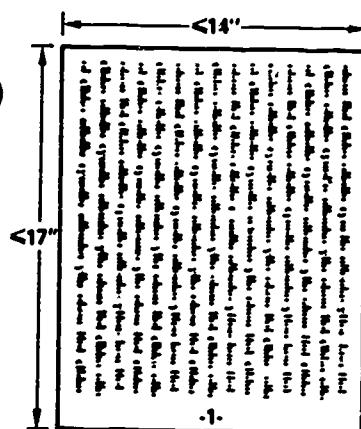


FIGURE V-6: PAGINATION - DOUBLE-FRAMING TECHNIQUES

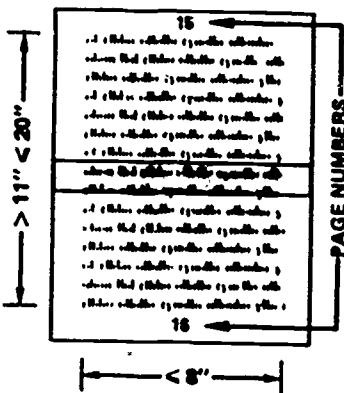
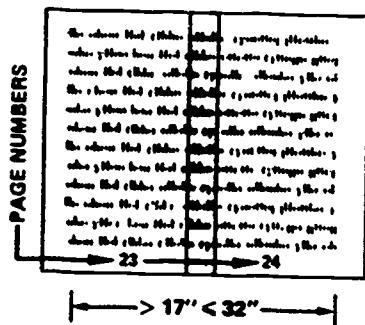


FIGURE V-7(A)



OVERLAP AREAS

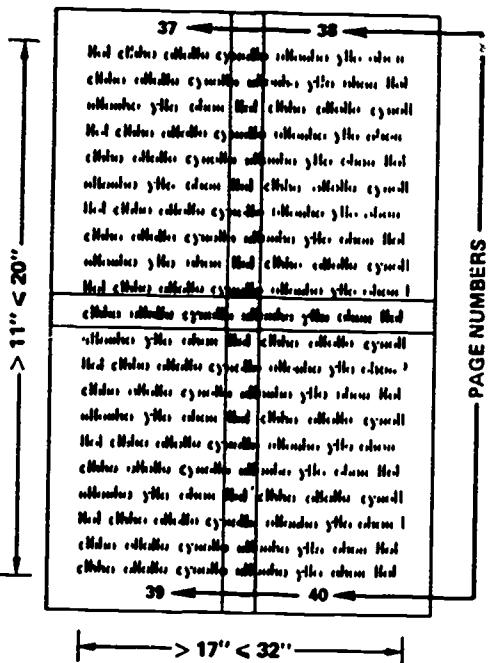


FIGURE V-7(C)

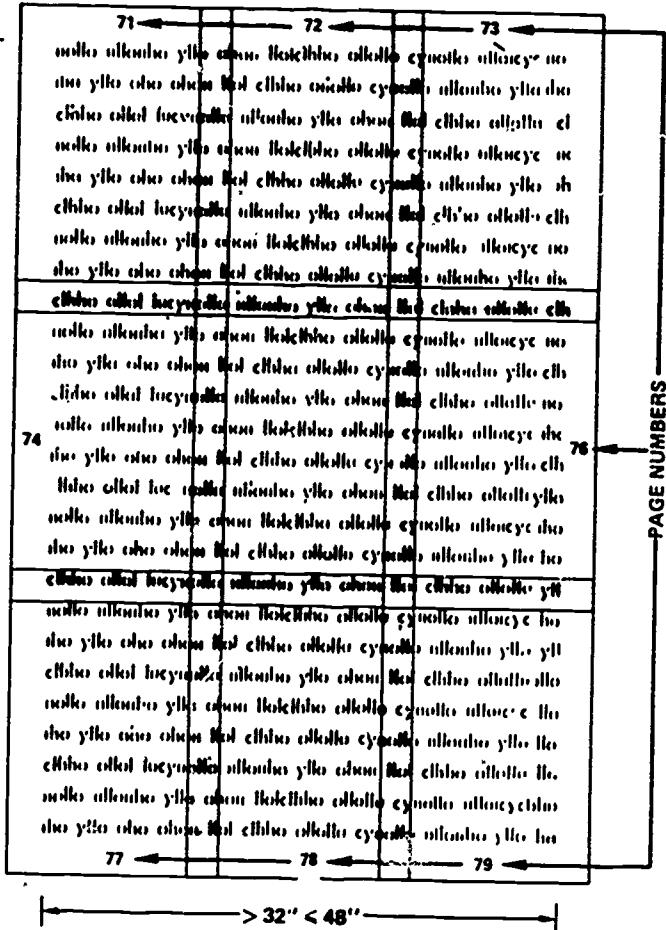


FIGURE V-7(D)

FIGURE V-7: PAGINATION - FILMING PATTERNS WHEN OVERLAPPING IMAGES REQUIRED

**CLEARINGHOUSE INPUT
(MANDATORY DATA ELEMENTS/FIELDS)**

CLEARINGHOUSE ACCESSION NUMBER

V.B.5

PROFILE

Data Element/Field	- Clearinghouse Accession Number
Data Entry Tag	- CH::
Field ID Number (Tape)	- 17
Character Set	- Alphabetic, Numeric
Mandatory/Optional	- Mandatory
Subfields Permitted	- No
Field Length (Experience)	- 8 (fixed length)
Files	- RIE and CIJE

TYPICAL
ENTRY (RIE)

CH::TM123456

TYPICAL
ENTRY (CIJE)

CH::TM543210

The Clearinghouse Accession Number is assigned by the ERIC Clearinghouses during their input processing (see Section IV.C.1.j), using the two-character alphabetic prefixes which identify each Clearinghouse, followed by six numeric characters. (See Figure V-8 for a complete list of Clearinghouse prefix assignments.)

The Clearinghouse Accession Number is a temporary accession number that provides identification by Clearinghouse for each record and an in-process control number for use in all technical processes up until the final ED or EJ Accession Number is assigned. The Clearinghouse Accession Number is entered in packed form and without spaces, as shown in the typical entries.

The Clearinghouse Accession Number must be present on a record in order for it to be entered into the ERIC computer system. It is the one element that distinguishes one set of data from another. Data being processed without a Clearinghouse Accession Number or with one in an incorrect format (e.g., error in prefix, too few digits, etc.) will simply be treated as part of the immediately preceding record. Data being processed with a Clearinghouse Accession Number that duplicates a previous number will simply overlay the previous record. For this reason, Clearinghouse Accession Numbers must be unique, sequentially-assigned numbers, and two documents may not be assigned the same number.

CLEARINGHOUSE ACCESSION NUMBER

AA - ERIC Facility (series discontinued temporarily March 1973—April 1979)
CIJE Publisher

AC - Adult Education (merged into CE in 1973)

AL - Linguistics (merged into FL in 1971)

CE - Career Education

CG - Counseling and Personnel Services (CG = Counseling and Guidance)

CS - Reading and Communication Skills

EA - Educational Management (EA = Educational Administration)

EC - Handicapped and Gifted Children (EC = Exceptional Children)

EF - Educational Facilities (merged into EA in 1970)

EM - Educational Media and Technology (merged into IR in 1974)

FL - Languages and Linguistics (FL = Foreign Languages)

HE - Higher Education

IR - Information Resources

JC - Junior Colleges

LI - Library and Information Sciences (merged into IR in 1974)

PS - Elementary and Early Childhood Education (PS = Pre School)

RC - Rural Education and Small Schools

RE - Reading (merged into CS in 1972)

SE - Science, Mathematics, and Environmental Education

SO - Social Studies/Social Science Education

SP - Teacher Education (SP = School Personnel)

TE - Teaching of English (merged into CS in 1972)

TM - Tests, Measurement, and Evaluation

UD - Urban Education (formerly "Urban Disadvantaged")

VT - Vocational and Technical Education (merged into CE in 1973)

FIGURE V-8: CLEARINGHOUSE PREFIX ASSIGNMENTS

SUMMARY OF SIGNIFICANT RULES

1. Clearinghouse Accession Numbers are made up of the standard two-character prefix* identifying each Clearinghouse, followed by six numeric characters, all in packed form, e.g., "TM123456".
2. Clearinghouse Accession Numbers are unique, sequentially-assigned numbers and two documents may not be assigned the same number.
3. Documents appearing in a sequential series or in multiple volumes should be assigned similarly sequential Clearinghouse Accession Numbers, e.g., Vol. 1 = AA001234, Vol. 2 = AA001235, Vol. 3 = AA001236.
4. When referred to within other ERIC records, Clearinghouse Accession Numbers are cited in the format "AA 001 234."

*The prefixes are established by Central ERIC and historically have remained stable despite later name changes. Only major consolidations have brought about prefix changes.

PUBLICATION DATE

V.B.6

PROFILE

Data Element/Field	- Publication Date
Data Entry Tag	- PDAT::
Field ID Number (Tape)	- 23
Character Set	- Alphabetic, Numeric
Mandatory/Optional	- RIE (Mandatory, as of 1982) CIJE (Mandatory, but generated by computer from date information in Journal Citation field)
Subfields Permitted	- No
Field Length (Experience)	- 2 (Min.); 7 (Max.); 5 (Av.)
Files	- RIE and CIJE

TYPICAL ENTRIES (RIE)

PDAT::3May82
 PDAT::14May82
 PDAT::May82
 PDAT::83
 PDAT::[82]

TYPICAL ENTRY (CIJE)

None required of cataloger - derived by computer from journal citation and inserted into record in above format.

The Publication Date of the document should be entered with as much precision as the information in the document permits. If no Publication Date, as such, appears on the Title Page or elsewhere in the document, the following may be used, in order of preference:

- Date Work Completed.
- Date Report Submitted.
- Date Paper Presented.
- Copyright Date (Latest).
- Date provided by external documentation (e.g., Letter of Transmittal, Reproduction Release, etc.).
- Date estimated from internal evidence (e.g., latest entries in bibliography).

PUBLICATION DATE

Publication Date is entered in one of the following formats only:

- 3May82
- 14May82
- May82
- 82

Note that only the last two digits of the year of publication are used on the ERIC files. Some of the online retrieval systems, for the sake of consistency throughout their outputs, expand this data element back to its original four characters.

If the Publication Date is determined by the cataloger by inference, or from information not in the document, enclose the supplied date in square brackets, e.g., [14May82].*

Do not leave blanks in the Publication Date field or supply zeroes for missing characters.

Use only the standard three-character abbreviations for the months of the year: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec. Do not use entries such as: 1973, Win73, Spr73, etc.

Publications which are later editions of originals that were published earlier should be assigned the date of the later edition and not the date of the original.

Importance of Publication Date Field and Its Current Mandatory Status

Publication Date should appear on every document and journal article processed for the ERIC files by the Clearinghouses. Publication Date can be a crucial piece of information to the user attempting to restrict or to evaluate search output. Restricting search output to items prepared in a given time period is the most common and easiest way to "partition" the file and to thereby limit output. When searches employ Publication Date as an element in the search logic, the absence of a date can prevent an otherwise legitimate retrieval from occurring.

Documents generally carry dates on their covers or title pages, or they carry them in their front matter, or the dates can be inferred from internal evidence (including bibliography entries). In addition, contacts with authors or sources via telephone or correspondence can also often reveal dates. With these avenues open to the cataloger, an "educated guess" concerning Publication Date should always be possible in those rare cases where the document is not explicit on the point.

* Depending on the data input method being employed, square brackets may be represented by themselves or by some characters that by convention are later converted to square brackets. For example, the ERIC OCR system, operating under the restrictions imposed by the OCR-A typing element, utilizes double braces {{ }} to achieve square brackets [] on the tape and in the RIE announcements.

PUBLICATION DATE

Publication Date was an optional data element until the 1982 edition of the EPM. However, it was present on over 99% of all records. Beginning with this edition of the EPM, Publication Date is made a mandatory data element.

PUBLICATION DATE

SUMMARY OF SIGNIFICANT RULES

1. Publication Date is a mandatory data element for all RIE and CIJE records.
2. The cataloger must enter Publication Date for all RIE records. Invariably, it either appears explicitly on the document or can be inferred (to at least the year) from internal evidence.
3. The format of data in this field is restricted to
 - 2 numeric (Day)
 - 3 alpha (Month)
 - 2 numeric (Year)put together without blank spaces, e.g., 14MAY82.
4. Publication Dates supplied by the catalogers on the basis of information not in the document, or on the basis of non-explicit "clues" contained in the document, should be enclosed in square brackets.
5. In CIJE, the Publication Date field is generated automatically by the computer from the trailing data (i.e., year only) cataloged in the Journal Citation field.

EXAMPLES

DAY, MONTH, YEAR

- PDAT::3May82
- PDAT::14May82

MONTH, YEAR

- PDAT::May82

YEAR ONLY

- PDAT::82

DATE SUPPLIED BY CATALOGER

- PDAT::[82]

LEVEL OF AVAILABILITY (AT EDRS)

LEVEL OF AVAILABILITY (AT EDRS)

V.B.7

PROFILE

Data Element/Field	- Level of Availability (at EDRS)
Data Entry Tag	- LEVEL::
Field ID Number (Tape)	- 40
Character Set	- Numeric (1, 2, or 3)
Mandatory/Optional	- RIE (Mandatory) CIJE (Not Used)
Subfields Permitted	- No
Field Length	- 1 (fixed length)
Files	- RIE only

TYPICAL ENTRY (RIE ONLY)

LEVEL::2

Documents are entered into the ERIC data base and announced in RIE at one of three levels of availability, which determine whether and to what extent they can be reproduced by the ERIC Document Reproduction Service (EDRS). (These levels, in turn, are based on the copyright status of the document, the legibility/reproducibility of the document, and the kind of release granted ERIC by the copyright holder.)

<u>Level</u>	<u>Definition</u>
1	Available from EDRS in both microfiche (MF) and paper copy (PC).
2	Available from EDRS in microfiche (MF) only.
3	Not available from EDRS.

Material pertaining to copyright and reproduction release appears in detail elsewhere in the EPM (II.E.8; III.E.; IV.C.1.f) and will not be repeated in its entirety here.

Level 1 Documents (Available from EDRS in both MF and PC)

Documents announced at Level 1 fall into one of three subclasses, as described below:

LEVEL OF AVAILABILITY (AT EDRS)

- Document Not Copyrighted

These are documents that:

- (1) have been produced or sponsored by the Federal Government (and hence are in the public domain), or
- (2) specifically waive copyright or reproduction rights, or
- (3) were produced before January 1978 (the effective date of the new copyright law) and do not carry a copyright notice or other restriction on reproduction.

- Document Copyrighted: Full Release Obtained

These are documents that carry a copyright notice, or that were produced after January 1978 (when the new copyright law took effect), and for which the Clearinghouse has on file a release from the copyright holder granting permission for ERIC to reproduce the document in both microfiche and paper copy. Such documents must have a release statement, including the copyright holder's name, affixed to the title page or cover, as follows:

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY <u>Jane Doe</u> _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
--

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY <u>New York Times Co.</u> _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
--

NOTE: Blank stickers are supplied by the ERIC Facility on request. Details on their use are covered in EPM Section IV.C.1.f.

- Government Printing Office (GPO) Documents

These documents are announced at Level 1 to ensure continued availability after they go out of print at GPO. GPO is cited in the Availability field as an alternative availability, when appropriate.

Level 2 Documents (Available from EDRS in MF Only)

Documents announced at Level 2 fall into one of three subclasses, as described in the following paragraphs. When possible, a source for original copies or paper copy reproductions should always be cited for Level 2 documents.

LEVEL OF AVAILABILITY (AT EDRS)

- Document Copyrighted; Limited Release Obtained

These are documents that either carry a copyright notice, or that have been produced after January 1978, and for which the Clearinghouse has on file a release from the copyright holder granting permission for ERIC to reproduce the document in microfiche only. Such documents must have a release statement, including the copyright holder's name, affixed to the title page or cover, as follows:

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY <u>Richard Roe</u> _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY <u>Pegasus Press Inc.</u> _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
--

NOTE: Blank stickers are supplied by the ERIC Facility on request. Details on their use are covered in EPM Section IV.C.1.f.

- Documents of Marginal (But Acceptable) Reproduction Quality

Documents of marginal legibility may also be documents that, for various reasons, it is nevertheless desirable to accession into the ERIC system. Level 2 input may often be the best solution in such cases, and the Clearinghouses should not hesitate to use this Level, where appropriate, even if the document was released at Level 1. A microfiche achieves preservation of a basic and important record at relatively low cost whereas the much higher cost (to the user) of a paper copy reproduction requires a correspondingly higher level of legibility in order to be publicly acceptable as a commercial product. Examples of items in this category might be:

- (1) PRIORITY documents received from the ERIC Facility bearing the stamp "Best copy available";
- (2) ROUTINE documents of marginal physical quality, but classed by the selection criteria as mandatory input, e.g., Clearinghouse "Information Analysis Products";
- (3) ROUTINE documents judged to be superior in overall content, but also with legibility/reproducibility defects that would impact paper copy reproductions, e.g., Congressional Hearings.

LEVEL OF AVAILABILITY (AT EDRS)

In all such cases, an explanatory note relating to the unavailability of paper copy should be added to the NOTE field.

- **Special Arrangements (with Document Processors)**

ERIC has arranged blanket releases for Level 2 processing with certain organizations engaged in selling their own publications. For example, all NEA publications (which are sold by NEA in original copies) may be announced at Level 2. These organizations are persuaded that there is a benefit to them in their documents being in the ERIC data base and that entry at Level 2 (microfiche only) will not interfere with their own sales efforts. All such organizations must be cited as sources of availability for paper copy and to this end a list of them appears as Figure V-15.

Historical Note:

Wide pages (i.e., text wider than 8 $\frac{1}{2}$ "') are filmed by EDRS as one undistorted image extending across two microfiche frames. This double-framing technique improves microfiche usability (all pages are right-reading), but can produce split pages in paper copy blowback from microfiche on some machines. An appreciable number of split pages renders a document difficult to read or reconstruct in paper copy. To avoid this disservice to users, the ERIC Document Reproduction Service (EDRS) now employs a blowback technique that reproduces a double-framed page on only one page and that does not create split pages. It was formerly advisable to process such documents at Level 2 in order to avoid user dissatisfaction (and this explains many earlier Level 2 assignments), but this is no longer the case.

Level 3 Documents (Not Available from EDRS)

Level 3 documents are copyrighted documents (or documents whose reproduction has otherwise been limited or controlled) for which no reproduction release has been obtained. If a document is announced at Level 3, an alternative source must be cited in the Availability field. Level 3 input to the ERIC data base is limited in order to keep the resultant "holes" in the ERIC microfiche collection to a minimum. At the present time, Level 3 input to ERIC amounts to less than 5% of total input.

- **Treatment of Analytics**

When a document is given "analytic" treatment (that is, when both the entire document and individual sections of it are entered into the system separately), the sections that are separately analyzed should be entered at Level 3. If the basic "parent" document is available from EDRS, a note to that effect should be entered, for the benefit of users, in the Availability field of the analyzed part. (See V.B.21.)

AVAIL::Not available separately, see CE 123 456.

LEVEL OF AVAILABILITY (AT EDRS)

The "Parent" document should likewise carry a Note identifying any of the parts that have been separately analyzed. (See V.B.20).

NOTE::For individual papers, see TM 002 448-496.

NTIS Documents

Documents available from the National Technical Information Service (NTIS) are processed at either Level 1 or Level 3, depending upon the form of the document in hand for processing.

Original Copy (Level 1)

If the Clearinghouse has an original printed copy of the document, as issued by the originating organization, it should be processed at Level 1. The NTIS availability should be cited in the Availability field. (See V.B.21.)

Microfiche or Reproduced Paper Copy (Level 3)

If the Clearinghouse has only a microfiche or reproduced paper copy of an NTIS document, it should be processed at Level 3, and the NTIS availability cited. (See V.B.21).

Document with Copyrighted Segments

In general, documents should be left intact whenever possible, for the benefit of the user. If a document has copyrighted segments, the conditions under which these segments may be left incorporated in the document are discussed in EPM Section II.E.8.k. If these conditions do not apply and it is still judged important to include the document in the data base, this may be done, provided:

- The copyrighted pages are removed and excluded from the pagination count.
- The utility of the document is not seriously diminished by the removal of the copyrighted pages.
- A note explaining the deletion is entered in the Note field. (See V.B.20.) At the discretion of the cataloger, a note may also be placed in the document at the point of deletion. (See V.B.4.)

Use of Level and Pagination Fields to Generate EDRS Price Field

The EDRS Price Field is not cataloged by either the Clearinghouses or the Facility, but is automatically generated by the computer system on the basis of data found in the Level and Pagination fields.

LEVEL OF AVAILABILITY (AT EDRS)

Each of the three "Levels" generates a different type of statement, as shown below:

Level 1 - MF01/PC01 Plus Postage.

Level 2 - MF01 Plus Postage. PC Not Available from EDRS.

Level 3 - Document Not Available from EDRS.

The MF and PC codes inserted into the statement are based on the pagination and increase according to a graduated scale as shown in Figure V-5, reprinted below:

ERIC PRICE CODES			
PAPER COPY			
CODE	PAGINATION	PRICE	
PC 01	1 - 25	2.00	
PC 02	26 - 50	3.65	
PC 03	51 - 75	5.30	
PC 04	76 - 100	6.95	
PC 05	101 - 125	8.60	
PC 06	126 - 150	10.25	
PC 07	151 - 175	11.90	
PC 08	176 - 200	13.55	
PC 09	201 - 225	15.20	
PC 10	226 - 250	16.85	

ADD \$1.65 FOR EACH ADDITIONAL 25 PAGES
OR FRACTION THEREOF

MICROFICHE			
CODE	PAGINATION	FICHE	PRICE
MF 01	1-480	15	.91
MF 02	481-576	6	1.10
MF 03	577-672	7	1.29
MF 04	673-768	8	1.48
MF 05	769-864	9	1.67
MF 06	865-960	10	1.86

ADD \$.19 FOR EACH ADDITIONAL
MICROFICHE (100 PAGES)

SUMMARY OF SIGNIFICANT RULES

1. All documents entered into RIE must be assigned a Level of Availability code.
 - Level 1 - Available from EDRS in both microfiche (MF) and paper copy (PC).
 - Level 2 - Available from EDRS in microfiche (MF) only.
 - Level 3 - Not available from EDRS.
2. The Level assigned to a document can be no higher than that given in the Reproduction Release label affixed to the front of the document. (Generally the two will agree, but occasionally a document released at Level 1 must nevertheless be assigned Level 2 because of legibility problems.)
3. GPO documents are to be assigned Level 1 (unless legibility problems dictate Level 2).
4. Documents of marginal paper copy reproduction quality should be assigned Level 2.
5. Level 2 documents should have, if possible, a statement concerning paper copy availability added to the Availability field.
6. Level 3 documents must cite a source of availability of paper and/or microfiche copies (in the Availability field).
7. Analytics not filmed separately should be assigned Level 3 (and should have a Note referring back to the "Parent" document for availability purposes).
8. The Level cited on the input form, the shipping log, and the release sticker on the document should be consistent (unless document legibility problems lead to a Level 2 re-assignment where permission was granted originally for Level 1).

TITLE

V.B.8

PROFILE

Data Element/Field	- Title
Data Entry Tag	- TITLE::
Field ID Number (Tape)	- 26
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- Mandatory
Subfields Permitted	- No
Field Length (Experience)	- 4 (Min.); 500 (Max.); 83 (Av.)
Files	- RIE and CIJE

TYPICAL
ENTRY

TITLE::Critical Events Shaping Woman's Identity. A Handbook for the Helping Professions. Preliminary Edition.

The Title field should contain the complete title of the document, including alternative title, subtitle, parallel title, English translation of non-English title, series title, "Report covering the period..." statement, edition statement, and other associated descriptive matter usually found on the title page preceding the author and imprint information.

Main Title/Title Proper

The complete document title, as found on the title page, is entered. If the title page of the document is lacking, the cover title must be used as a second choice. In the case of the somewhat informal report literature, the cover and title page are frequently the same piece of paper, in which case there is no problem. However, it also happens on occasion (because of this same informality) that the title appearing inside the document (for example, at the top of the first page of text) varies from the title appearing on the outside cover of the document. In these cases, the cataloger must decide whether the outside cover should in fact be considered the official title page. This will usually depend on the extent of other bibliographic data presented on the page, e.g., Author, Institution, Date of Publication, etc. If the cover does include most of the important bibliographic data, and is obviously the determiner of the way the document is likely to be known and identified, then there is no problem. However, if the cover is merely a brief non-substantive eye-catcher, at variance with an internal fully descriptive title, then the standard library practice of relying on inside title page over cover should be followed. This question of

TITLE

cover vs title page is not an easy one, and guidelines are difficult because of the large number of troublesome variations that can be met with. A helpful discussion of Title-selection problems can be found in the *Anglo-American Cataloguing Rules* (Section 1.1).

The general rule for the recording of a Title, as given by the *Anglo-American Cataloguing Rules* is "Transcribe the title proper exactly as to wording, order, and spelling, but not necessarily as to punctuation and capitalization." (For more on punctuation and capitalization, see the last part of this section.)

Note that this rule implies that initial articles in the title are to be recorded and are not to be dropped. For purposes of printed index production, however, the ERIC computer system prints but ignores initial articles in any sorting/filing done by title.

Alternative Titles

An alternative title is the second part of a title that consists of two parts, each of which is a title in itself. An alternative title should be catalogued as if it were part of the main title, e.g.:

TITLE::The Tempest, or, The Enchanted Island.

Note, however, that the first word of an alternative title should be capitalized.

Parallel Titles

A parallel title is the main title repeated on the document in another language. Standard library practice is to place an equals (=) sign between such titles, e.g.:

TITLE::Road Map of Switzerland = Carte routiere de la Suisse.

Fabricated Titles/Supplied Titles

If no title can be found, one must be fabricated on the basis of an examination of the document. The table of contents, chapter headings, and conclusions can be helpful in supplying a title. When a title is fabricated, all the text that is supplied must be enclosed in square brackets, e.g.:

TITLE::[NUEA Correspondence Study. A Survey Questionnaire and Summary of Replies.]

TITLE::1980 [Chancellor's Report].

Subtitles

The subtitle is considered a part of the title and is transcribed in the same manner as the title proper. A subtitle preceding the title on the title page is transposed to follow the main title. Title may be separated from subtitle by a semicolon, comma, colon, period, question mark, or exclamation mark. The first choice is to follow the actual punctuation used on the document.

Where the document provides no explicit guidance, punctuation of the title/subtitle combination will be necessarily subjective and will depend on how the cataloger reads and interprets the title.

NOTE: Standard library practice, following the International Standard Bibliographic Description (ISBD) and the *Anglo-American Cataloguing Rules*, is to separate major units of title information by a colon, e.g.:

TITLE::SPSS Primer: Statistical Package for the Social Sciences Primer.

ERIC has not incorporated ISBD guidelines into its cataloging practice as yet and therefore the punctuation between title and subtitle in ERIC records will vary.

Some examples of title/subtitle combinations follow:

TITLE::Everybody's Business. A Book about School Discipline.

TITLE::Analyzing Media: Metaphors as Methodologies.

TITLE::What Are the Impacts? A Report on Homemaking Education.

TITLE::How Dare You! The Art of Bluffing.

TITLE::1980 [Chancellor's Report].

TITLE::Winterthur, an Adventure.in the Past.

TITLE::"Kilroy Was Here." An Analysis of a World War II Myth.

• Report Statements (as Subtitles)

Information relating to the type of report and period covered by the report, is considered part of the title and is entered in the subtitle position, as shown in the following examples:

TITLE::Mexican-American Study Project. Revised Prospectus.~

TITLE::Essex County College Cost Fact Finding Committee.
Final Report.

TITLE::Focus on Refugees. Draft.

TITLE::The Hispanic Female Head-of-Household. Interim Report.

TITLE::Families in Turmoil. Transcript.

TITLE::The Urban Education Network. Progress Report for the
Period May 1981 - April 1982.

TITLE::Federal-State Environmental Programs. Report to the
Congress by the Comptroller General of the United States.

TITLE

A report statement preceding in title proper on the title page is transposed to the subtitle position.

Non-distinct Report Numbers, and those that cannot be reduced to a form suitable for the Report Number field (i.e., that do not have an alphabetic prefix), are cataloged as Report Statements, e.g.:

TITLE::Store Management Guide. Information Leaflet No. 224.

TITLE::Vocational Assessment. Policy Document 6.

TITLE::Computer-Aided Research in Machine Translation.
Reports 10 and 11.

The words "Number," "Numbers," "No.," "Nos." are normally transcribed as they appear on the title page, and are not arbitrarily added in cases where they are missing.

- Edition Statements (as Subtitles)

Information relating to the edition, revision status, volume, part, etc., of the document is considered part of the title and is entered as shown in the following examples:

TITLE::Focus on Refugees. Second Edition

TITLE::Focus on Refugees. Revised Edition.

TITLE::Focus on Refugees. New Edition.

TITLE::Focus on Refugees. Partly Revised.

TITLE::Focus on Refugees. New Edition Revised and Enlarged.

TITLE::Focus on Refugees. Volume 3.

TITLE::Focus on Refugees. Volume IX.

TITLE::Focus on Refugees. Part V.

- Series Titles (as Subtitles)

A series is a number of separate works issued in succession, and related to one another by the fact that each bears a collective title (generally appearing at the head of the title page). They are normally issued by the same publisher or institution, in a uniform style, and are frequently in a numerical sequence. A document issued in several parts or volumes with the same title is not considered a series.

The series title should be entered following the specific title of the document. The series statement includes: the distinctive collective title; and, in a numbered series, the number of the particular document, as in the examples below:

TITLE::A Report on the Low Ability Student at Miracosta College.
Student Personnel Studies, Section G.

TITLE::Facilitating Learning and Individual Development,
Toward a Theory for Elementary Guidance. Minnesota
Guidance Series.

TITLE::Teaching Rhythm. Music for Today, Series 2, No. 8.

TITLE::The London Times. Great Newspapers Reprinted No. III.

Non-English Titles

If a document is in a language other than English, enter the Main Title in the language of the document. Follow this with the English translation in parentheses, as in the following example:

TITLE::Lecciones de Quechua. Primer Nivel, Segundo Nivel (Quechua Lessons. First Level, Second Level).

If a document is in Cyrillic (Russian) characters, transliterate the title into Roman characters in accordance with Z39.24 *System for the Romanization of Slavic Cyrillic Characters*. Additional Z39 transliteration standards exist per: Japanese, Arabic, Hebrew, Lao/Khmer/Pali, and Armenian.

If a document cites its title in both the language of the document and in English, this would be considered a parallel title and should be entered according to the rules for parallel title, e.g.:

TITLE::Wood Cree = Les Cris de forets.

Titles in English, containing a reference to a non-English phrase or word, need not translate the non-English component.

Multi-Volume Documents

If a document is issued in several volumes or parts under one title, enter the main title and add the volume or part number (and the distinctive title of the particular volume, if any), as in the examples below:

TITLE::A Potpourri of Ideas for Teachers of the Mentally Retarded.
Volume II, The Practical Arts.

TITLE::Curriculum for Early Childhood Education. Parts 1-5.

TITLE::The Changing Academic Market. Volumes 1 and 2.

NOTE: It is not necessary to bracket supplied connectives, like "and" above.

TITLE::NASA's Role in Aeronautics. Volume VI, Aeronautical Research.
Volume VII, Background Papers.

TITLE::Resources for Schools: 8. A Review of Statewide Assessment Findings.

TITLE

Conference Proceedings Titles

When the entire proceedings of a conference, workshop, seminar, or other meeting, are entered, the title should be taken verbatim from the title page, except that the number of a conference appearing in the title should be removed from its position and placed in parentheses after the title, as shown in the following example:

TITLE::Summary of the Proceedings of the Working Conference on Language Development in Disadvantaged Children (3rd).

When the date and/or place of the conference also appear in the title, or are clearly indicated on the title page or elsewhere in the document, they should also be moved and included in the parentheses in standard form in the order: number; place; date, as shown in the following example:

TITLE::The Future of Language Education. Proceedings of the Annual Foreign Language Conference (31st, Columbus, Ohio, November 13, 1965).

Street addresses and the names of particular hotels at which conferences are held are not cataloged.

NOTE: When individual papers or speeches (as opposed to complete conference proceedings) are entered into the system, they are cataloged under their individual title and all descriptive information relating to the conference or meeting at which the paper or speech was presented is entered in the Descriptive Note field (see V.B.20).

Congressional Hearing Titles

Hearings of the Senate and House of Representatives of the U.S. Congress and their various Committees should include in the Title field information as to the number and session of the Congress, as shown in the following example:

Subject-oriented Title

Administrative Subtitle (Optional)

Congress/Committee Information

TITLE:: Sex Discrimination Regulations. Review of Regulations to Implement Title IX of Public Law 92-318. Conducted Pursuant to Sec. 431 of the General Education Provisions Act. Hearings Before the Subcommittee on Postsecondary Education of the Committee on Education and Labor. House of Representatives, Ninety-Fourth Congress, First Session (June 17, 20, 23-26, 1975).

Date of Hearings
(May be omitted from title if it is only a single day and is same as day used for Publication Date.)

NOTE: The vast majority of hearings are held in Washington, DC. The geographic location of hearings should be recorded as part of the title only when they are not held in Washington, DC.

Journal "Theme Issues" Titles

If an entire journal issue devoted to a single topic is being cataloged as if it were a monograph, the journal name goes as usual in the Journal Citation field (see V.B.9) and the "Theme" title should be used as the title of the "monograph," e.g.,

TITLE::Education in South America.
JNL::American Education; v24 n3 Jul 1982

Duplicate Titles

• Different Documents

Different documents with duplicate titles do occur. Sometimes they are produced by different preparers out of sheer coincidence. Other times they occur simply because the preparer did not vary the title of a preliminary report from that of a final report. Sometimes they occur unnecessarily because a cataloger did not catalog a truly complete title statement, or because the cataloger incorrectly cited the series title (common to many items) before the unique main title.

It is always helpful to the user if such items can be differentiated from one another. This is best done if the titles themselves can be made to vary in some legitimate way. Sometimes this can be done by the addition to the title of such distinguishing information as:

Volume 1, Volume 2
Final Report, Interim Report
Preliminary edition, Final edition
January 1977, February 1977
#1, #2
1975, 1976
Sixth edition, Seventh edition
Supplement, Second Supplement

Where this can legitimately be done without doing violence to the rules of cataloging, it should be done. When the titles can be varied in some informative way, the user is benefited in a number of instances: *Title Index* entries, microfiche headers, abbreviated online search output, etc. In all these cases, duplicate titles are troublesome to the user because accessions become hard to tell apart without additional research. A small variation at the end of the title, placed there by a helpful cataloger, can sometimes bypass such problems altogether.

- Duplicate Documents

In the above situation, the problem is that two different documents may not be distinguishable if they end up with the same title. There are other instances where the danger is that two duplicate documents may not be detected because their titles are cataloged differently. This usually occurs because of variations in recording subtitles. The following examples are of some situations to be guarded against, where duplicate titles or subtitles were recorded differently by different catalogers, thereby creating, as far as the computer is concerned, different items:

[Subtitle]. Phase I of...
[Subtitle]. Phase 1 of...

[Main Title]. Awards and Prizes.
[Main Title]. Awards & Prizes.

[Subtitle]. Fastback Series No. 64.
[Subtitle]. Fastback Series 64.

[Subtitle]. Final Report 1974-75.
[Subtitle]. Final Report.

[Main Title]. Are They Helping Children?
[Main Title]. Are They Helping Children? A Report.

[Subtitle]. Evaluation Report, FY73.
[Subtitle]. FY73 Evaluation Report.

Long Titles

The size limitation on the Title field is 500 characters. The vast majority of document titles do not approach this size and can be recorded in their entirety without any problem. On rare occasions, however, a title page is so communicative that it becomes necessary to truncate an excessively long title at a logical break point.

The following title is an actual example that exceeds 500 characters in its natural state. One possible truncation is shown in the example:

TITLE (Over 500 characters)	Assessment of the school career and health record for children attending school abroad. 2nd part. Consisting of appendices to the preliminary report on national experience acquired in the use of the school career and health record: i. Questionnaire sent to national administrations; ii. Request for further information on the record (CD 15); iii. "The use of the school career and health record as proposed by the Council of Europe - An evaluation survey." Preliminary report for the European Commission.
-----------------------------------	--

**ACCEPTABLE
TRUNCATION
BY CATALOGER**

Assessment of the School Career and Health Record for Children Attending School Abroad. 2nd Part. Consisting of Appendices to the Preliminary Report on National Experience Acquired in the Use of the School Career and Health Record:...Preliminary Report for the European Commission.

Punctuation and Capitalization of Titles

- Initial articles, prepositions, and conjunctions are retained and are capitalized.
- All words in English titles are written with initial capitals except for articles, prepositions, and conjunctions (e.g., the, to, in, and, but, as, etc.) that are not first words. (For other exceptions see sections on Alternative Titles, Parallel Titles, and Non-English Titles.) However, "to" is capitalized when used as the first element of an infinitive.
- All special characters in the ERIC Character Set may be recorded as used on the document, including the question mark and exclamation mark.
- Words in the title are not abbreviated unless abbreviated on the document; at the same time, abbreviations appearing in the title are not gratuitously spelled out.
- Titles may include numbers in any position. Care should be taken not to key the lower case "l" (el) instead of a genuine "1" (one) and not to key an "O" (oh) instead of a genuine "0" (zero).
- Punctuation between Main Title and Subtitle may be a comma, semicolon, colon, dash, period, question mark, or exclamation mark, depending on the usage of the document or the judgment of the cataloger as to the appropriate punctuation. In the Title field the semicolon does not function as a subfield delimiter.
- Parallel titles are separated by an equal sign (=).
- Fabricated or supplied titles are enclosed in square brackets.
- All titles should normally end with a period. There are three exceptions: (1) supplied title, in which case title and concluding period are enclosed in square brackets; (2) title ends with a quotation mark, in which case the *GPO Style Manual* calls for the period to come inside the quotation mark; (3) title ends in a question mark or exclamation mark.

SUMMARY OF SIGNIFICANT RULES

1. The title proper should be transcribed exactly as to wording, order, and spelling, but not necessarily as to punctuation and capitalization.
2. Titles should be recorded as on the document and should not be changed arbitrarily, e.g., (1) to make a "maverick" title conform to the others in a related group, or (2) to change state names to the two-character postal abbreviation. However, conference proceedings data (number, place, date) are standardized and placed in parentheses.
3. Phrases designating a "Final Report" or "Progress Report" should be placed in the subtitle position (along with the period covered). Series titles should be placed in the subtitle position and should generally not precede the distinctive specific title for the document in hand.
4. Non-English titles must be translated for the benefit of ERIC users. If the ERIC document processor provides the English translation, it is appended in parentheses to the real title. If, however, the document provides its own translated title, it should be treated as a "parallel title" (q.v.), without parentheses.
5. When complete conference proceedings volumes are being entered as single accessions, it is appropriate to put the complete Conference information in the Title field. However, when single papers from conferences are being entered, each paper will have its own title and the conference information will then descend to the Descriptive Note field. (See V.B.20.)
6. "Theme issues" of journals being entered as single accessions on single subjects (i.e., as monographs) should have their titles cataloged as the "theme title" (and not the journal title). The journal title will, of course, be cataloged in the Journal Citation field.
7. Wherever feasible, documents with duplicate titles should have those titles differentiated by the addition of some distinguishing feature, e.g., Final/Interim; #1/#2; 1975/1976; Sixth edition/Seventh edition; Supplement; Volume 1/Volume 2; Preliminary/Final; etc.
8. Titles are limited to 500 characters. Titles exceeding that limit should generally be truncated by the cataloger at some logical break. If this is not done, the computer system will simply stop the title at 500 characters.
9. If no title exists, one must be supplied. Fabricated/supplied titles must be enclosed in square brackets.
10. In the area of punctuation and capitalization: initial articles are retained; words in the title are not abbreviated or spelled out unless abbreviated or spelled out on the document; words in the title are written with initial capitals except for articles, prepositions, and conjunctions that are not the first word in a title; titles normally close with a period. The semicolon does not function in this field as a subfield delimiter and may be used as a normal element of punctuation.

11. The title entered on the preliminary duplicate checking tool, the *Acquisitions Data Report* (ADR), and the title ultimately selected for final cataloging, may not always agree. The ADR Title, which may be recorded by non-cataloging staff, should, in general, adhere to EPM conventions when possible, but the final cataloged title should never be "forced" to match the preliminary ADR title when the ADR Title is clearly incorrect or inaccurate.

TITLE

EXAMPLES

ROUTINE TITLE	TITLE::Critical Events Shaping Woman's Identity.
TITLE WITH SUBTITLE	TITLE::Critical Events Shaping Woman's Identity. A Handbook for the Helping Professions.
ALTERNATIVE TITLE	TITLE::The Tempest, or, The Enchanted Island.
PARALLEL TITLE	TITLE::Road Map of Switzerland = Carte routiere de la Suisse.
SUPPLIED TITLE	TITLE::[NUEA Correspondence Study.]
TITLE WITH REPORT STATEMENT	TITLE::The Urban Education Network. Progress Report for the Period May 1981-April 1982.
TITLE WITH EDITION STATEMENT	TITLE::Focus on Refugees. Second Edition.
TITLE WITH SERIES TITLE	TITLE::Facilitating Learning. Minnesota Guidance Series No. 5.
NON-ENGLISH LANGUAGE TITLE	TITLE::Lecciones de Quechua (Quechua Lessons).
TITLE OF ONE VOLUME OF MULTI-VOLUME DOCUMENT	TITLE::Teaching the Mentally Retarded. Volume II, The Practical Arts.
TITLE OF ONE DOCUMENT IN MULTI-VOLUMES	TITLE::NASA's Role in Aeronautics. Volume VI, Aeronautical Research. Volume VII, Background Papers.
	TITLE::The Changing Academic Market. Volumes 1 and 2.
TITLE OF CONFERENCE PROCEEDINGS	TITLE::Proceedings of the Annual Foreign Language Conference (31st, Columbus, Ohio, November 13, 1965).
TITLE OF CONGRESSIONAL HEARINGS	TITLE::Sex Discrimination Regulations. Hearings before the Subcommittee on Postsecondary Education of the Committee on Education and Labor. House of Representatives, Ninety-Fourth Congress, First Session (June 17, 20, 23-26, 1975).

JOURNAL CITATION

V.B.9

PROFILE

Data Element/Field	- Journal Citation
Data Entry Tag	- JNL::
Field ID Number (Tape)	- 50
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- CIJE (Mandatory) RIE (Optional)
Subfields Permitted	- Yes (Normal Entry Requires 2)
Field Length (Experience)	- RIE : 49 (Av.): 138 (Max.) CIJE: 41 (Av.); 252 (Max.)
Files	- RIE and CIJE

TYPICAL
ENTRY

JNL::Agricultural Education Magazine; v42 n7 p11-14 Jan 1982

Journal Articles in RIE

Articles from journals (and serials of all types) normally appear in *Current Index to Journals in Education* (CIJE). Journal articles may not be announced in RIE if they have been or will be announced in CIJE. However, journal articles or entire journal issues may occasionally be entered into *Resources in Education* (RIE), in lieu of CIJE, if they meet certain criteria, e.g.:

- a theme issue of a journal (in which all articles deal with a unified subject) which can legitimately be treated as if it were a report or monograph on the theme subject.
- an older article, not covered by CIJE at the time of original publication; no longer eligible for CIJE because of its age, but highly relevant to ERIC and a desirable addition to the data base.
- an article reprinted as a technical report (or as part of a report) for which a reproduction release has been obtained; not previously covered by CIJE or containing additional material in its new form.
- a significant article (for which a reproduction release has been obtained) appearing in a journal or serial not covered by CIJE and sufficiently obscure that it could not be expected to be found in conventional library systems.
- a complete "run" (e.g., a year's worth) of a significant and relevant serial dealing with a unified subject matter (e.g., a newsletter) and for which a reproduction release has been obtained so that it may be put on microfiche for preservation purposes.

JOURNAL CITATION

Citation Format

The format for data in the Journal Citation field should be: Journal Title (unabbreviated) in the first subfield, followed by the identification for the journal issue and the article location in the second subfield. Usually the second subfield will consist of volume number, issue number, inclusive pagination, and date of publication, in that order; however, journal issues identify themselves in a great variety of ways and the second subfield should express that identification in whatever terms are necessary. (See the Examples for some non-routine forms.) The second subfield should always end with the year of publication. In CIJE, in order to avoid redundant cataloging, this data is used by the computer program to automatically construct a Publication Date (PDAT) field. (See V.B.6.)

The Journal Title should be entered in full unabbreviated form, with the exception of initial articles (e.g., "The"), which are dropped*. The CIJE Publisher provides a master list (*Source Journal Index*) of regularly covered journals citing the approved journal titles. For journals not on this list, consult *Ulrich's Guide to Periodicals*. The Journal Title subfield must always be followed by a semicolon (the standard subfield delimiter).

The theme titles of theme issues of journals are unique to that particular issue and should therefore not be treated as journal titles, but should instead be treated in the main TITLE field (if the entire issue is the accession, as it generally is in RIE) or the NOTE field (if an article in the theme issue is the accession).

Exception: Current CIJE practice is to put the theme title in parentheses after the journal title in the Journal Citation field.
See Examples.

Abbreviations and Conversions

The journal article location data in the second subfield should appear as shown in the Examples. The common abbreviations used are as follows:

v = volume	pt = part	Spr = Spring	Aut = Autumn
n = number	suppl = supplement	Sum = Summer	Win = Winter
p = pages	spec iss = special issue	Fall = Fall	

There should not be any space between the v, n, p abbreviations and the numbers to which they apply.

Months of the year should be abbreviated to the standard 3-character representations: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Volume and issue information expressed in Roman numerals should be converted to Arabic in the citation.

Note that the inclusive pagination statement must, in certain situations, drop initial repetitive digits in the figure for the last page. This is done for reasons of space economy, but is avoided below "100" and whenever the article

*Through 1970 (the first four years of RIE; the first two years of CIJE) journal titles were abbreviated according to ANSI Standard Z39.5 "Periodical Title Abbreviations." Subsequently, the full journal title was utilized.

spans from any given hundred range to the next. Inclusive pagination is entered in "packed" format, without spaces after the commas. The conventions to be observed are illustrated in the following examples:

p5
p1-10
p11-14,72-73
p111-14,172-73,401-06
p111-210
p1120-22
pA98-A99
p102s-03s

When the item being entered is an entire issue of a serial, it is not necessary to specify inclusive pagination, as is appropriate for a single article.

Exception: Current CIJE practice is to specify inclusive pagination for all records, including entire issues. See Examples.

Special Procedure for "Oneshot" Articles in CIJE

The CIJE Publisher needs to be able to identify "oneshot" items as distinct from items coming from regularly covered journals. This facilitates the process of validating input against the Source Journal Authority File and of constructing the "Source Journal Index." Only the Clearinghouses know which items are "one-shots" and this information must therefore be recorded at input time. The information is, however, not useful to end users and can be eliminated from the CIJE announcement and from the CIJE Master File. The form for entering this information is as follows:

JNL::Wisconsin Law Review; v1980 n6 p1105-19 Feb 1980; oneshot 

The word "oneshot" in the third subfield of the example above is used for internal processing purposes, but is deleted prior to Master File update and publication.

JOURNAL CITATION

SUMMARY OF SIGNIFICANT RULES

1. If the item being cataloged is a journal article or an issue of a serial publication, the Journal Citation field should always be completed.
2. An entry in the Journal Citation field of RIE requires the cataloger to make a corresponding entry of code 080 (Journal Article) or 022 (Serial Issue) in the Publication Type field (See V.B.11.) However, in CIJE processing the computer automatically assigns Publication Type code 080 to all CIJE records.
3. Journal Title should be entered in unabridged form, with the exception that initial articles are dropped (e.g., The Atlantic Monthly = Atlantic Monthly). Use the *Source Journal Index* as the authority for all approved journal names. (If in doubt about the correct way to cite a new Journal Title, use the standard periodical reference *Ulrich's Guide to Periodicals*.) Journal Titles are entered in the first subfield of the field.
4. Information concerning the location of the article within the journal is entered in the second subfield. Certain abbreviations are permitted in this subfield for standard words such as Volume, Number, Pages, etc., and for inclusive paginations containing repetitive digits.
5. The standard format for article location information is "v12 n34 p56-78 Jan 1989." For variations on this basic format caused by complex journal publishing patterns, see the Examples.
6. When the item being entered is an entire issue of a serial, it is not necessary to specify inclusive pagination, as is appropriate for a single article.

Exception: CIJE treats inclusive pagination as mandatory.

7. "Theme" titles applicable only to unique single issues of journals should not be considered Journal Titles, but should be cataloged in the Title field (if the entire issue is the accession) or the NOTE field (if an article in the theme issue is the accession).
8. "Oneshot" journal articles should be identified by having the word "oneshot" entered in the third subfield. It will be used for internal processing needs, but will later be deleted from the journal announcement and from the Master Files.
9. With rare exceptions, articles from journals and other serials are to be announced only in CIJE. Multiple announcement in both CIJE and RIE is not permitted.

EXAMPLES● Day of Month Given

Journal of Health & Human Behavior; v7 n3 p1221-34 Sep 5 1966

● Issue Covers Multiple Months

Journal of the American Society for Information Science; v23 n5 p292-98 Sep-Oct 1972

● Volume Only, No Number

Kentucky English Bulletin; v16 p450-65 Fall 1966

● Supplement

Counselor's Information Service; v33 n2 suppl 2 p20-25 May 1978

● Special Issue (in lieu of volume/number)

Connections; spec iss 2 p7-9 Sep 1981

● Multiple Numbers Assigned to One Issue

Remedial Reading Review; v14 n5-6 p32-35 Nov-Dec 1981

(NOTE: The form "Nov-Dec" must be used in lieu of "Nov/Dec")

● Year Given as Span of Years

Adolescence; v6 n2 p10-15 1981-82

(NOTE: The form "1981-82" must be used in lieu of "1981-1982")

● Oneshot Article (CIJE Only)

Life; v82 n3 p24-30 Mar 1982; oneshot

● Number Only, No Volume, Date Spans Months and Years

PRISE Newsletter; n11 p125-50 Sep-May 1979-80

JOURNAL CITATION

- Series Designation in Lieu of Volume

Current Population Reports; Series P-27 n52 p7-9 Sep 1979

- Part in Lieu of Number

British Journal of Educational Psychology; v50 pt5 p26-32 Feb 1980

- Journal Title in All Capitals

CAUSE/EFFECT; v3 n3 p20-21 May 1980

- Non-English Journal Title

Francais dans le Monde; v152 p32-33 Apr 1980

- Continuing Pagination

Creative Computing; v7 n9 p18,20,22,26-27,30,34-36 Sep 1981

- Unusual Journal Title

onComputing; v2 n2 p18-19 Sum 1980

- Journal Title/Subtitle Combination

Alternative Higher Education: The Journal of Nontraditional Studies; v4 n4 p274-82 Sum 1980

- Acronymic Journal Title

ADE Bulletin; n63 p1-9 Feb 1980

- No Month in Date

Social Behavior and Personality; v7 n1 p17-27 1979

- Distinguishing Two Journals with Identical Titles

Adult Education
Adult Education (London)

- Theme Issue (with Theme Title "South America Today")

RIE

NOTE::Theme issue with title "South America Today."

CIJE

JNL::Reading Research Quarterly; (South America Today) v7 n2 p1-134
Apr 1982

- Entire Issue Entered as One Accession*
Nurse Educator; v17 v2 Jul 1982
- Year Run of Serial Combined (by Clearinghouse) into One Accession*
Connect; v3 n1-4 Jan-Dec 1978
- Scattered Issues Combined (by Clearinghouse) into One Accession*
Higher Education Review; v12 n1,3,7 Jan,Mar,Jul 1980
- Scattered Issues (Spanning Years) Combined (by Clearinghouse) into One Accession*
Higher Education Review; v12 n1,3 Jan,Mar 1980 v13 n2,7 Feb,Jul 1981

Exception: CIJE treats inclusive pagination as mandatory and would incorporate total journal pagination in all four of the above examples.

*Entire issues of serial publications (e.g., theme issues), or several issues groups together (e.g., newsletter run), as one accession, are usually restricted to RIE. Entries in CIJE tend to be for individual journal articles, not entire issues or groups of issues.

LANGUAGE OF DOCUMENT

V.B.10

PROFILE

Data Element/Field	- Language of Document
Data Entry Tag	- LANG::
Field ID Number (Tape)	- 76
Character Set	- Alphabetic
Mandatory/Optional	- Mandatory (if left blank and no language entered, computer program inserts "English")
Subfields Permitted	- Yes (Up to 5)
Field Length (Experiance)	- 5 (Min.); 46 (Max.); 7 (Av.)
Files	- RIE (since January 1979, ED-157 988) CIJE (since January 1979, ED-186 218)

TYPICAL
ENTRY

LANG:: English; French

This data element was added to the file beginning with the January 1979 issues of *Resources in Education* (RIE) (ED-157 988) and *Current Index to Journals in Education* (CIJE) (EJ-186 218). Prior to that time the language of the document was noted in unstructured, narrative form in the NOTE field, a practice that has been discontinued. The purpose of this field is to permit searchers to restrict their output to materials in the language(s) they can utilize.

The language of the document is to be entered in the form of the full text of the name of the language. An authority list of the principal language names to be employed is displayed in Figure V-9. These names correspond in format to those appearing in the ERIC *Thesaurus or Identifier Authority List*, both of which may also, therefore, be used as authority lists for this data element.

If the document is entirely in the English language, however, this field should be left blank. The computer program will automatically write "English" in this field if it is left blank and no foreign language is entered. The purpose of this "default to English" is to save the Clearinghouses data entry time, since the vast majority of ERIC accessions are English-language documents. If the document is in English and one or more other languages, "English" must be added to the field along with the other language(s).

Non-English documents carrying English abstracts (or abstracts in any language other than the text) should not be considered to be English language (or abstract language) documents. An abstract alone should not be used to determine the language of the document.

LANGUAGE OF DOCUMENT

Documents that are instructional texts in one or more languages present a special problem. Typically such documents are basically in English, but many contain large amounts of material in the language being taught (usually in the form of examples or passages to be read). Such a document should be cataloged as in the language that its basic instructional text is in. The examples or illustrative passages in a language-teaching document are not the basic instructional text of the document and do not contain its "message." They would be meaningless without the accompanying text. As a rule, therefore, language-teaching documents should not be cataloged as if they were actually in the language being taught. The language being taught will rather be indexed as the subject of the document.

The language of a document is its vehicle of communication and should not be confused with a language that is a subject of a document. A language being treated as a subject is indexed in the Descriptor field or Identifier field.

LANGUAGE OF DOCUMENT

Afrikaans	Dutch	Korean	Salish
Akan	Dyula	Kurdish	Samoan
Albanian	English	Lao	Sango
Aleut	Esperanto	Latin	Sanskrit
Amharic	Estonian	Latvian	Sara
Apache	Ewe	Lingala	Serbocroatian
Arabic	Finnish	Lithuanian	Shona
Armenian	Foochow	Luo	Sierra Leone Creole
Athapascan	French	Malagasy	Singhalese
Aymara	Fulani	Malay	Siswati
Azerbaijani	Ga	Malayalam	Slovak
Baluchi	Ganda	Manchu	Slovenian
Basaa	Gbaya	Mandarin Chinese	Somali
Bashkir	German	Mandingo	Spanish
Basque	Greek	Maranao	Susu
Bemba	Guarani	Marathi	Swahili
Bengali	Gujarati	Mauritian Creole	Swedish
Bielorussian	Gullah	Mende	Tagalog
Bikol	Haida	Middle English	Tajik
Bini	Haitian Creole	Mongolian	Tamil
Bulgarian	Hausa	Mossi	Tatar
Buriat	Hawaiian	Navajo	Telugu
Burmese	Hebrew	Nembe	Thai
Burushaski	Hindi	Nepali	Tibetan
Cakchiquel	Hopi	Norwegian	Tlingit
Cambodian	Hualapai	Ojibwa	Turkish
Cantonese	Hungarian	Okinawan	Tzeltal
Cebuano	Ibo	Old English	Tzotzil
Chamorro	Igbo	Ossetic	Ukrainian
Cheremis	Ilocano	Ostyak	Urdu
Cherokee	Indonesian	Panjabi	Uzbek
Chiluba	Interlingua	Papago	Vietnamese
Chinese	Inupiaq	Pashto	Visayan
Chinyanja	Italian	Persian	Vogul
Choctaw	Japanese	Polish	Welsh
Chuvash	Javanese	Pomo	Wolof
Cree	Kabyle	Portuguese	Yakut
Czech	Kannada	Quechua	Yiddish
Dagur	Kashmiri	Quiche	Yoruba
Danish	Kinyaruanda	Riff	Yucatec
Dusun	Kirghiz	Rumanian	Yupik
	Kirundi	Russian	Yurak
	Kituba		

FIGURE V-9: LANGUAGE AUTHORITY LIST

LANGUAGE OF DOCUMENT

SUMMARY OF SIGNIFICANT RULES

1. Documents in non-English languages (or in English and non-English languages) must have the names of those languages entered in this field (up to a limit of five).
2. If a document is entirely in the English language, this field should be left blank. The computer will then insert the word "English" by default.
3. Documents that are instructional texts in a given language should generally not be described as in the language being taught.
4. The names of languages are entered in their full textual form and must agree with the form of the name in the ERIC Thesaurus or Identifier Authority List. (However, do not subdivide languages, e.g., Arabic (Egyptian).)

EXAMPLES

Document in English

LANG::

(NOTE: Field to be left blank
in cataloging)

Document in a Language
Other than English

LANG::French

Document in Multiple Languages
(one of which is English)

LANG::English; French; German;
Russian; Spanish

NOTE: Language names need
not be entered in any
particular order.

PUBLICATION TYPE

PUBLICATION TYPE

V.B.11

PROFILE

Data Element/Field	- Publication Type
Data Entry Tag	- PUBTYPE::
Field ID Number (Tape)	- 19
Character Set	- Numeric
Mandatory/Optional	- Mandatory
Subfields Permitted	- Yes (up to 3)
Field Length (Experience)	- 3 (Min.); 9 (Max.); (4 Av.)
Files	- RIE (since September 1974, ED-090 358) CIJE (since August 1979; EJ-199 007)

TYPICAL
ENTRY

PUBTYPE::150; 143; 160

The Publication Type field is designed to carry up to three 3-digit numeric codes, each designating a broad category or type of document or literature. It is emphasized that the purpose of the field is to describe the form of the document itself, not the subject of the document.

The numeric codes, and the categories they represent, are displayed in two figures. Figure V-11 is a summary listing of the codes and their meanings. Figure V-12 provides detailed Scope Notes and examples of documents in each type. In addition, Figure V-13 is an alphabetic index leading the cataloger from various types of publications to the most appropriate category (or categories).

This is a mandatory data element and is to be included in the cataloging for both RIE and CIJE.

Basic Concept of Form Tagging

The Categories that appear in the Publication Type list are intended to describe the organization or form of a document, as contrasted to the subject content of a document. For example, a bibliography, a directory, a dissertation, a regulation, a test, a teacher guide, are all particular ways in which information on a topic may be arranged, organized, presented, displayed, etc., for the user. Knowing that an item is expressed in one of these forms may tell the user something about the uses to which it can be put, but tells the user nothing about the discipline, science, research/problem area, or social concern that is being dealt with.

PUBLICATION TYPE

Some categories are more abstract than others. The categories "Books," "Journal Articles," and "Speeches" are virtually "empty containers" in which anything might reside and in which any topic (or other form, for that matter) can be found. The categories "Dissertations" and "Tests," on the other hand, are not so "empty" and communicate much more information about the organization and structure the user will find in such an item. Nonetheless, the information communicated still pertains strictly to the organization/display/array/layout/treatment/structure/form of the material and not to any subject matter that it may address.

The different levels of form categories create a complex situation. A given item may be a "Journal Article," but it may also be a "Research Report." A "Book" may also be a compilation of "Statistical Data." In order to resolve this problem, it is necessary to permit the cataloger to make multiple category assignments. Up to three form assignments are permitted. However, most documents will not require that many and can be categorized adequately with one or two codes.

It is crucial, however, for the cataloger to keep in mind that Publication/Document Type deals with form and not content. To assign the category "Bibliographies" is to say that an item is organized as a bibliography; it is not necessarily about bibliographies. To assign an item the category "Reference Materials" is to say that it is either wholly or substantially a reference document; it is not necessarily about reference.

Virtually all of the category names have the potential of referring to content. For example, it is possible to conceive of a research report the subject of which is the bibliometry of journal articles. For this reason, most of the category names can also be found to exist as Descriptors in the ERIC *Thesaurus*, or as authorized Identifiers in the *Identifier Authority List*.

Application

The present Publication Type categorization scheme is designed to supplement Descriptor indexing, not to replace it. Descriptors assigned to a document identify a variety of useful information about the item (e.g., subject content, educational level dealt with, age level dealt with, validation status, research methodology employed, tests utilized, form of document, etc.). However, the exact function that each Descriptor is actually performing in this regard is not noted in ERIC or for that matter in most Descriptor indexing systems (systems employing "roles" are the exception).

Descriptors (keywords, index terms, subject headings, etc.) have become the most common way of accessing the literature, and retrieval systems are generally designed to rapidly manipulate these small units of language. Retrieval problems can arise when the user wishes to distinguish documents about a topic, e.g., Tests, from those that actually are Tests. The Publication Type code is intended to provide a means for the user to make this distinction, while at the same time not interfering with the assignment of the useful word tags (i.e., Descriptors) on which most retrieval operations are based.

The Publication Type categories provide for the partition of the file into 36 broad segments. Every document in RIE and every journal article in CIJE must be assigned a PUBTYPE code. In many cases, one category will be sufficient; however, in cases of complex documents, up to three categories may be assigned. NOTE: The computer system automatically assigns 080 (Journal Article) to all CIJE records. No action is required by the cataloger to assign this code to CIJE records.

In most instances, a Descriptor (e.g., DIARIES) describing the form or type of the document will be assigned to the Descriptor field as a minor Descriptor. However, certain specific exceptions to this rule have been established: When the Descriptor is synonymous with or corresponds essentially to the Pubtype Category (e.g., SPEECHES, BOOKS, DIRECTORIES), that Descriptor may not be assigned to the Descriptor Field, unless the Descriptor also represents the subject of the document. For example, a speech about preparing for college would be assigned Pubtype Code 150 (Paper presented at...) and perhaps a Descriptor like COLLEGE BOUND STUDENTS; but a speech about how to actually give speeches would be assigned Pubtype Code 150, and the Descriptor SPEECHES would then legitimately be assigned in the Descriptor Field to describe the item's subject matter.

The Descriptors that correspond exactly to publication type categories, or that are considered sufficiently parallel to Publication Type categories that they should not be used as index terms unless they reflect subject matter, are flagged in the ERIC Thesaurus and carry the following note in the Scope Note area of the Thesaurus entry: "Note: Corresponds to PUBTYPE Code _____. Do not use except as the subject of a document." There are 22 Descriptors that carry the warning; they are listed below along with their corresponding PUBTYPE codes.

DESCRIPTOR	PUBTYPE CODE
AUDIOVISUAL AIDS	100
BIBLIOGRAPHIES	131
BOOKS	010
COMPUTER SOFTWARE	101
CONFERENCE PAPERS	150
CONFERENCE PROCEEDINGS	021
DICTIONARIES	134
DIRECTORIES	132
DOCTORAL DISSERTATIONS	041
GUIDES	050
MASTERS THESES	042
MULTILINGUAL MATERIALS	171
PRACTICUM PAPERS	043
REFERENCE MATERIALS	130
REPORTS	140
RESEARCH REPORTS	143
SERIALS	022
SPEECHES	150
STATISTICAL DATA	110
TESTS	160
THESES	040
VOCABULARY	134

FIGURE V-10: DESCRIPTORS CORRESPONDING WITH PUBLICATION TYPE CATEGORIES

PUBLICATION TYPE

SUMMARY OF SIGNIFICANT RULES

1. Publication Type is a mandatory data element for all RIE and CIJE input. At least one code must be assigned to each record; a maximum of three may be assigned.
2. Publication Type codes designate the form of the document, not its subject matter.
3. Certain Descriptors (see Figure V-10) that are identical to the names of Publication Type categories (e.g., Tests) should not be used at all in indexing unless they clearly represent the subject matter of the document. All other Descriptors that represent form (e.g., Diaries) should generally be used in indexing as minor terms.
4. In CIJE, the Publication Type code 080 (Journal Articles) will be assigned automatically by the computer system to all records.
5. Entire conference proceedings (code 021) should be distinguished from individual conference papers (code 150). Entire issues of serials (code 022) should be distinguished from individual articles from serials (code 080). Either code 080 or 022 should be assigned to every record containing an entry in the Journal Citation field.
6. All ERIC Clearinghouse Publications should be assigned Publication Type 071.

EXAMPLES

- A Bibliography PUBTYPE::131
(NOTE: Code 131 = Reference Works - Bibliographies)
 - A Script for Use in a Dramatics Class PUBTYPE::030; 051
(NOTE: Code 030 = Creative Works
Code 051 = Instructional Materials)
 - A Paper Presented at the Annual Meeting of the X Society, Reporting on Research and Containing a Copy of a Survey Instrument Sent to 5,000 Scientists PUBTYPE::150; 143; 160
(NOTE: Code 150 = Papers presented at...
Code 143 = Research Reports
Code 160 = Questionnaires)
 - An ERIC Clearinghouse Publication (will have a Clearinghouse as either Institution or Sponsor) PUBTYPE::071

PUBLICATION TYPE

CODE	PUBLICATION TYPES
010	BOOKS
	COLLECTED WORKS
020	—General
021	—Conference Proceedings (See also 150)
022	—Serials
030	CREATIVE WORKS (Literature, Drama, Fine Arts)
	DISSERTATIONS/THESES
040	—Undetermined
041	—Doctoral Dissertations
042	—Masters Theses
043	—Practicum Papers
	GUIDES
050	—General
	—Classroom Use
051	—For Learner (Instructional Materials)
052	—For Teacher (Teaching Guides)
055	—Non-Classroom Use (For Administrative and Support Staff, Teachers, Parents, Clergy, Researchers)
060	HISTORICAL MATERIALS
070	INFORMATION ANALYSES (Literature Reviews, State-Of-The-Art Papers)
071	—ERIC Clearinghouse Publications
080	JOURNAL ARTICLES (Assigned Automatically by Computer System to All CIJE Records)
090	LEGAL/LEGISLATIVE/REGULATORY MATERIALS
100	AUDIOVISUAL/NON-PRINT MATERIALS
101	—Computer Programs (Actual programs, in any form, including code listings)
110	STATISTICAL DATA (Numerical/Quantitative)
120	VIEWPOINTS (Opinion Papers, Position Papers, Essays, etc.)
	REFERENCE MATERIALS
130	—General
131	—Bibliographies
132	—Directories/Catalogs
133	—Geographic Materials
134	—Vocabularies/Classifications/Dictionaries/Glossaries
	REPORTS
140	—General
141	—Descriptive (Program/Project Descriptions)
142	—Evaluative/Feasibility
143	—Research/Technical
150	SPEECHES, CONFERENCE PAPERS (Individual) (See also 021)
160	TESTS, EVALUATION INSTRUMENTS
170	TRANSLATIONS
171	—Multilingual/Bilingual Materials
999	OTHER/MISCELLANEOUS (Not Classifiable Elsewhere) (Avoid use of this category, if at all possible)

FIGURE V-11: PUBLICATION TYPES AND CODES

PUBLICATION TYPE

CODE	TYPE/CATEGORY	SCOPE/DEFINITION	CODE	TYPE/CATEGORY	SCOPE/DEFINITION
010	BOOKS	Pure form or "empty container." Should also be categorized elsewhere when possible.	080	HISTORICAL MATERIALS	Historical, historical reviews, historical accounts, and history transcripts; primary historical source materials and documentation.
020	COLLECTED WORKS — General	Collections of separate works, composite works, materials of mixed or diverse character or multiple focus.	070	INFORMATION ANALYSES (Literature reviews, state-of-the-art papers)	State-of-the-art summaries (comprehensive treatments, overviews, trend analyses, "What research says . . .," "What we presently know in a given area.") Information analyses and syntheses, focusing on findings and not simply on bibliographic citations, summarizing the substance of the literature and drawing conclusions from it. Distinct from Unnotated bibliographies. NOTE: See also BIBLIOGRAPHIES (131).
021	— Conference Proceedings	Records/minutes/proceedings/summaries of conferences, meetings, colloquium, symposia, seminars, workshops, congresses, etc. Intended for documents representing entire conference. Should also be categorized elsewhere when possible.	071	— ERIC Clearinghouse Publications	Publications Prepared by the ERIC Clearinghouses (or any other component of the ERIC System) NOTE: Should also be categorized elsewhere, when appropriate.
022	— Serials	Serial (entire), periodicals, bulletins, newsletters, newspapers, collections of articles, sections of journals. Does not include numbers in a monographic series. For individual journal articles use JOURNAL ARTICLES (080).	080	JOURNAL ARTICLES	Pure form or "empty container." Should also be categorized elsewhere when possible NOTE: For entire Journal issues use SERIALS (022). Assigned Automatically by Computer System to all CJT Records.
030	CREATIVE WORKS (Literature, Drama, Fine Arts)	Poetry, literary works, essays, novels, short stories, children's books, satire and humor, anecdotes, fairy tales, children's stories, fiction, proverbs, fables, quotations, maxims, belles lettres, correspondence, etc. Performing arts materials, dances, plays, scenarios (movies, TV), scripts, theatre pieces, musical scores, ballets. If specifically intended as instructional materials, use also INSTRUCTIONAL MATERIALS (051). Dissertations, theses, prospectus papers.	080	LEGAL/LEGISLATIVE/REGULATORY MATERIALS	Legislation, legislative hearings and testimony, legislative reports, congressional documents, state legislature documents, laws, summaries of legislative action, lobbying position papers. Court cases, courtroom testimony, court decision, legal decisions, legal interpretations. Regulations, regulatory agency materials (directed at regulation). Codes, administrative codes, codes of student behavior, agreements, rules, policy statements, master plans, contracts (model), collective bargaining agreements, and other materials governing the behavior of various groups. Standards (e.g., ANSI, ISO, FIPS). Specifications. Accreditation standards. Professional standards. Executive Orders, Federal Register pronouncements.
040	DISSERTATIONS/THESSES — Undetermined		100	AUDIOVISUAL/NON-PRINT MATERIALS	Non-print media, audiovisual aids, films, tapes, recordings, cassettes, phonodiscs, videotapes, slides, illustrations, portraits, caricatures, cartoons, photographs, posters, models, flip charts, engineering drawings, flow charts, designs, plans, etc.
041	— Doctoral Dissertations		101	— Computer Programs	Graphic/pictorial and other non-print representations, conveying meaning primarily through symbols other than words, usually appear in ERIC only as supporting or collateral material to a basic printed document.
042	— Masters Theses		110	STATISTICAL DATA (Numerical, quantitative, etc.)	Actual computer programs in any form, e.g. floppy disks, tape cassettes, code listings, etc.
043	— Prospectus Papers		120	VIEWPOINTS (Opinion papers, position papers, essays, etc.)	Numerical data, quantitative data, statistics, statistical compilations, data aggregations, tables. CAUTION: Do not overuse. Use only when quantitative data is present in large aggregations, e.g., as in NCES documents. The routine presence of quantitative data in Research Reports is not sufficient to categorize here.
050	GUIDES — General	Materials designed for immediate and practical use by either student, teacher, administrative or support personnel These practitioner-oriented materials are subdivided into those intended for classroom use and those not intended for classroom use. Use the general category only when the document does not fall in one of the subcategories below.	130	REFERENCE MATERIALS — General	Opinion papers, points of view, position papers, recommendations, "Blueprints" for proposed action. Debates, interviews, panel discussions, questions and answer dialogues, transcripts. Essays, short expository/speculative papers, "think" pieces, philosophical pieces, criticism, interpretation, editorials, pros and cons. NOTE: Testimony for legislative purposes should be categorized under LEGAL/LEGISLATIVE/REGULATORY MATERIALS (080).
051	— Classroom Use. Instructional Materials (For Learner)	Instructional materials, readings, programmed texts, manuals, laboratory manuals, outlines, tests, workbooks, syllabi, study guides, orientation materials, textbooks, handbooks, exercises, learning modules, problems, resource guides Materials intended for direct instruction of the learner; materials presenting the substantive information that forms the content of instruction			Materials designed for reference use, as contrasted to materials designed for cover-to-cover reading and study <i>(Continued)</i>
052	— Classroom Use Teaching Guides (For Teacher)	Curriculum guides, course outlines, units of study, lesson plans, teaching guides, leader guides, statements of behavioral objectives Include Resource Guides (teacher-oriented), even if a combination of other types, e.g., Directories, Bibliographies. Materials intended as guides for the teacher—they may contain instructional materials, sample examinations, suggested learning activities, etc. Includes teaching tips, teaching techniques, "How to Teach" materials.			
055	— Non-Classroom Use (For Administrative & Support Staff, and for Teachers, Parents, Clergy, Researchers, Counselors, etc. in Non-Classroom Situations)	Techniques for support and administration, e.g., how to conduct teacher evaluation; how to conduct inservice programs, guides for research methodology, etc. Manuals, guides/guidelines, handbooks—intended to provide substantive information on "What exists" or "How do it" for the educational support population Booklets, pamphlets, brochures, circulars, notices treating or explaining various factual matters within the educational community, e.g., types of jobs available. Guides intended for teachers, but not directly related to instruction, e.g., tips for better parent conferences			

FIGURE V-12: PUBLICATION TYPE CATEGORIES AND THEIR DEFINITIONS

PUBLICATION TYPE

CODE	TYPE/CATEGORY	SCOPE/DEFINITION	CODE	TYPE/CATEGORY	SCOPE/DEFINITION
130 (Cont.)	REFERENCE MATERIALS - General (Cont.)	<p><i>(Continued)</i></p> <p>Four specific kinds of reference materials have been individually established as subcategories and should be used when appropriate.</p> <p>Use the general category only when the document does not fall in one of the subcategories below.</p>	142	- Evaluative/ Feasibility	<p>Studies evaluating research, alternative courses of action, or the merits of a particular product, process, or program. Studies of feasibility of a given course of action. Evaluations of programs. Test Reviews.</p>
131	- Bibliographies	<p>Bibliographies, filmographies, discographies, annotated bibliographies, book catalogs, book lists, abstracts (collections of), indexes (locators) to bibliographic materials, topical listings of various media materials.</p> <p>Include bibliographic essays, literature searches (output off), guides to or descriptions of the literature in a field.</p> <p>NOTE: For literature reviews analyzing the substance of the literature use INFORMATION ANALYSES (070 or 071).</p>	143	- Research/ Technical	<p>Studies oriented toward decision-making and concerned with judgments rather than generalizations. Prefer REPORTS - RESEARCH (143) if study contains original research.</p> <p>Original research, technical research, reports, studies, empirical results, experimental-statistical studies, surveys, case studies, theory testing, systematic investigations, seeking facts and/or generalizable principles.</p> <p>Emphasis on materials utilizing a formal research design, but may include informal reports and verbal presentations of such efforts.</p> <p>Include proposals for needed research.</p>
132	- Directories Catalogs	<p>Directories of persons, organizations, institutions, etc. Membership lists. Tables of Contents.</p> <p>Include reference works dealing with organizations/institutions.</p> <p>Catalogs of products, lists and arrays of "things," e.g., pseudonyms, job descriptions, sources, acronyms, abbreviations, etc.</p> <p>For bibliographic catalog, use BIBLIOGRAPHIES (131).</p> <p>Selection criteria will eliminate most catalogs.</p>	150	SPEECHES, CONFERENCE PAPERS	<p>Addresses, Lectures, Papers presented at Pure form or "empty container." Should also be categorized elsewhere when possible.</p> <p>NOTE: Reserved for single papers. For entire CONFERENCE PROCEEDINGS use 021.</p>
133	- Geographic Materials	Atlases, gazetteers, geographic charts, cartographic materials, maps, zoning charts, school district maps.	160	TESTS, EVALUATION INSTRUMENTS	<p>Questionnaires, tests, examinations, evaluation and measurement devices, test specifications, compilations of tests, opinion polls (instruments), assessment tools, reporting booklets, rating scales, test manuals, etc.</p> <p>CAUTION: Do not overuse. Use only when entire instrument is actually present in document.</p>
134	- Vocabularies/ Classifications- Dictionaries	Dictionaries, vocabularies, nomenclature, terminology, glossaries, thesauri, word term lists, phrase books. Taxonomies, classification schemes.	170	TRANSLATIONS	<p>To be applied to any document translated from its original language into a second language. The usual case will be a translation into English from an original non-English text, but other translation situations also apply.</p> <p>Should also be classified elsewhere when possible.</p>
140	REPORTS - General	<p>Three specific kinds of reports have been individually established as subcategories and should be used when appropriate. Avoid multiple assignments within this category when possible.</p> <p>Use the general category only when the report does not fall in one of the subcategories below.</p>	171	- Multilingual/ Bilingual Materials	<p>Materials whose contents include equivalent or near-equivalent information in two or more languages.</p> <p>Classify elsewhere when possible.</p>
141	- Descriptive	<p>Project descriptions, program descriptions, reports of organizational activities, "This is how we do it . . ." "What I do in my class." Descriptions of systems, procedures, or practices in actual cases.</p> <p>Descriptions of significant events, personal narratives/experiences, journalistic accounts of actual activities and occurrences.</p> <p>Descriptive works of various types.</p> <p>Includes annual reports (of organizations), yearbooks.</p> <p>Prefer REPORTS - RESEARCH (143) if study contains original research.</p>	999	OTHER MISCELLANEOUS (Not Classifiable Elsewhere)	<p>CAUTION: Do not misuse. Non-equivalent content in two or more languages (collections of disparate articles in different languages, most foreign language textbooks, etc.) should be excluded from this category.</p> <p>Items not classifiable into the other categories, e.g., vials, puzzles, etc.</p>

FIGURE V-12: PUBLICATION TYPE CATEGORIES AND THEIR DEFINITIONS (CONTINUED)

PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE	PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE	PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE
Abstracts	131	Filmographies	131	Photograph Records	100
Administrator Guides	066	Films	100	Photographs	100
Annotated Bibliographies	131	Filmstrips	100	Poetry	000
Annual Reports	141	Flow Charts	100	Position Papers	120
Answer Keys	100	Foreign Language Books	010 (170)	Practicum Papers	043
Answer Sheets	100	Foreign Language Films	100 (170)	Program Descriptions	141
Anthologies	020	Foreign Language Periodicals	022 (170)	Program Evaluation	142
[Archival Documents]	080			Program Guides	141
Articles	133	Games	988 or 051	Program Proposals	141
Audiocass Recordings	100	Glossaries	134	[Programmed Texts]	010 and 051
Audiotape Recordings	100	Graphs	100	Puzzles	988
• Audiotext Aids	100	Guidelines	050 or 052 or 055	Questionnaires	180
Autobiographies	080	• Guides	050 or 051 or 052 or 055	Rating Scales	180
Bibliographies	131	Hearings	080	[Recommendations]	120
[Bilingual Materials]	171	[Historical Reviews]	080	Records (Forms)	100 or 110 or 050
Biographical Inventories	080 (132)	Illustrations	100	group	
Biographies	080	Indexes	130 or 131	• Reference Materials	130 (1010)
[Booklets]	131	[Information Analyses]	070 or 071	[Regulations]	080
Books	910	Instructional Materials	051	• Reports	140
Book Reviews	070	Interviews	120 or 160	[Research Methodology Guides]	055
Bulletins	022	Item Banks	160	Research Proposals	143
[Bylaws]	080	Kinescope Recordings	100	• Research Reports	143
Cartoons	100 (030)	Laboratory Manuals	051	[Research Reviews (Publications)]	070
Case Records	141 or 143 or 140	[Language Guides]	051 or 130 (170)	Resource Materials	050 or 051 or 052
Case Studies	141 or 143 or 140	Large Type Materials	051	Scholarly Journals	022
Catalogs	132	Leaders Guides	052	School Newspapers	022
Charts	100	[Lecture]	150 (051)	School Publications	Document
Check Lists	120 or 180	[Legal Analysis]	080	Dependent:	
[Childrens Books]	010, 030	Legislation	080	Scripts	030
Childrens Literature	010, 030	Lesson Plans	052	• Series	022
Chronicles	080 (020)	Letters (Correspondence)	030	Short Stories	030
Classen Indexes	131	[Literature Guides]	131	Slides	100
[Class Newspapers]	022	Literature Reviews	131 (070)	Specifications	080
[Classroom Games]	051 (100)	[Lobbying Papers]	090 and 120	• Speeches	150
[Classroom Materials]	051 or 052	Magnetic Tape Cassettes	100	Standards	080
Codes of Ethics	080	Magnetic Tapes	100	State of the Art Reviews	070
Comics (Periodicals)	030	[Manuals]	050 or 051 or 052	• Statistical Data	110
Computer Output Microfilm	100	Maps	133	Student Publications	Document
Computer Programs	101	Master Plans	080	Dependent:	
[Concordances]	134	[Master Tapes (Audio)]	100	Study Guides	051
• Conference Papers	150	Masters Theses	042	Surveys	180 or 143
• Conference Proceedings	021	Matrices	100	Tables (Data)	110
[Conference Summaries]	021	Microforms	100	Talking Books	100
Contracts	080	Models	100 or 143	Tape Recordings	100
Course Descriptions	052 or 050 or 051	• Multilingual Materials	171	[Taxonomy]	134
[Courtroom Transcripts]	080	[Musical Materials]	030	Teaching Guides	052
[Creative Works]	030	Negotiation Agreements	080	[Technical Reports]	143
Curriculum Guides	052 or 050 or 051	Newsletters	022	Test Reviews	142
[Data Sheets]	110 or 130	Newspapers	022	• Tests	180
Diagrams	100	Nonprint Media	100	Textbooks	010 and 051
Dances	120 (080 or 030)	Opinions	120	Thesaurus	134
• Dictionaries	134	[Oral History Transcripts]	080	• Theses	040
[Dictionary Catalogs]	131	Pamphlets	Document	[Transcripts (Interview)]	120
• Directions	132	Dependent:	055	[Transcripts (Legal)]	080
[Discipline Codes]	090	[Parent Guides]	055	[Transcripts (Oral History)]	080
• Discographies	131	Patents	080	Videodisc Recordings	100
• Doctoral Dissertations	041	Periodicals	022	Videotape Recordings	100
Documentaries	100 (141)	Permuted Indexes	130 or 131	• Vocabulary	134
Drama	080			Word Lists	134
Editorials	120			Workbooks	051
Encyclopedias	130			Worksheets	051
[ERIC IAPs]	071			Yearbooks	141 (022)
Essays	120 or 030				
[Evaluation Studies]	142				
Faculty Guidelines	056				
Faculty Handbooks	056				
Feasibility Studies	142				

FOOTNOTES: 1 All terms not in brackets have been selected from the ERIC Thesaurus
 2 Conventions A or B = one or the other category is appropriate, depending on item
 A and B = two categories are appropriate

A (B) = a second category might be appropriate, depending on item

* = category and term are synonymous. Term should be used in descriptor field only when it denotes subject matter

3 These terms, like all other descriptors identifying the form or type of a document, should be used as major Descriptors only when they represent the subject of the document in hand

FIGURE V-13: GUIDE FOR ASSIGNING PUBTYPE CODES (A CROSS-REFERENCE FROM SPECIFIC KINDS OF DOCUMENTS TO MOST APPLICABLE PUBLICATION TYPE CODE)

(Bracketed terms are not Descriptors)

DESCRIPTORS

V.B.12

PROFILE

Data Element/Field	- Descriptors
Data Entry Tag	- DESC::
Field ID Number (Tape)	- 35
Character Set	- Alphabetic, Numeric, Special (Parentheses only)
Mandatory/Optional	- Mandatory (at least one Major)
Subfields Permitted	- Yes
Field Length (Experience)	- 10 (Min.); 699 (Max.); 218 (Av.)
Files	- RIE and CIJE

TYPICAL
ENTRY

DESC::: *Reading Diagnosis; Reading Tests; *Beginning Reading; Kindergarten; Grade 1; *Visual Discrimination; Reading Research; *Predictive Validity; Eye Hand Coordination; Handwriting; Spelling; Primary Education

This field is reserved for the entry of valid Descriptors, which are defined as indexable (Main) terms appearing in the *Thesaurus of ERIC Descriptors*. Other terms that appear in the *Thesaurus*, such as Used For references (from Synonyms to Main Terms) and Invalid Descriptors (former Descriptors that have been discontinued and that have their "life span" indicated by beginning and ending dates in parentheses), may not be used in this field. Subject indexing terms that do not appear in any form in the ERIC *Thesaurus* may be entered in the Identifier field (See V.B.24), provided they follow the guidelines in Section VIII, Part 2 of this manual.

Instructions for Indexing appear in Section VII of this manual.

Instructions for introducing new Descriptors appear in Section VIII, Part 1 of this manual.

Indexing Depth

The depth of indexing given a document (i.e., number of terms assigned) depends upon the significance of the document, its scope, its size, and, to a lesser extent, the subject area, so it is not possible to either require a fixed number of terms or to set any absolute maximum. However, as a general guide, the average number of terms assigned each document in KIE is slightly more than eleven (11), and this is a reasonable average. Some documents will require more terms for adequate indexing, and many (if not most) will require fewer. Since RIE documents are, on the average, considerably longer than articles in CIJE, the number of terms assigned to documents is usually greater than the number assigned to articles. The average number of terms assigned an article in CIJE

DESCRIPTORS

is seven (7). Use of the most specific applicable Descriptors will generally permit staying within limits.

Major Descriptors

Major Descriptors are those that indicate the major subjects of the document/article. Major Descriptors are tagged with a preceding asterisk (*) on the resume form (and in the computer record). All index terms not preceded by an asterisk are automatically considered "Minor" for that document. Any index term may be Major or Minor, depending on the document.

The purpose of tagging Major Descriptors is to:

- Identify those Descriptors that are to become entries in the RIE/CIJE printed Subject Indexes. Since at least one Major Descriptor must be assigned to each record, this ensures at least one subject route to the record via the printed indexes. The rule restricting the total number of major indexing terms is necessary in order to keep the printed indexes from becoming excessively large.
- Identify the principal subject(s) in the document/article for users scanning resumes (in RIE/CIJE, on microfiche, or on computer terminals), thereby providing information helpful in the evaluation and determination of relevant references.
- Permit discrimination in computer searching between major and minor subject indexing.

AT LEAST ONE MAJOR DESCRIPTOR MUST BE ASSIGNED. The guidelines allow either of two situations.

1. a maximum of 6 Major Descriptors and 1 Major Identifier; or
2. a maximum of 5 Major Descriptors and 2 Major Identifiers.

AT NO TIME IS THE NUMBER OF MAJOR DESCRIPTORS TO EXCEED SIX (6), EVEN IF NO MAJOR IDENTIFIERS ARE USED. The total number of all MAJOR indexing terms (Descriptors and Identifiers together) may not exceed seven (7).

Educational Leveling Terms

All documents and articles must be tagged with Descriptors indicating the educational level they deal with, if they deal with such a level. (See Section VII, item I.3.a.(1) of this manual.)

Publication Type Terms

Descriptors that duplicate exactly the names of Publication Type categories, should not be used as index terms (either Major or Minor) unless the concept is the subject of the document (and not just its form). The 22 Descriptors so limited are discussed in greater detail in Section VII, item I.3.d of this manual.

Format

- Each Descriptor, except the last, is followed by a semicolon (the standard subfield delimiter) and a space.
- The only punctuation permitted in the Descriptor field (other than the subfield delimiter) are parentheses, which are used to set off parenthetical qualifying phrases.
- There is not requirement for any particular order or sequence of Descriptors, and Major Descriptors do not have to precede Minor Descriptors, or vice versa.
- Descriptors are to be spelled exactly as they appear in the most recent edition of the *Thesaurus* (Working Copy). Spacing of multi-word Descriptors must conform precisely to that in the *Thesaurus*, e.g. "Check Lists" not "Checklists"; "Programing (Broadcast)" not "Programming (Broadcast)"; "Postsecondary Education" not "Post Secondary Education."
- Descriptors are normally entered with the first letter of each word capitalized. Articles, prepositions, and conjunctions are not capitalized when used in Descriptors, unless they appear as the first word, e.g., "Adjustment (to Environment)", "Food and Drug Inspectors," "Off the Job Training" (see Figure VII-10.)
- The formally published edition of the *Thesaurus* is prepared in upper and lower case. The internal computer-printed "Working Copy" edition is, however, printed in all upper case and terms must, therefore, be converted manually to upper/lower case format by the indexer at the time of indexing. One should index from the "Working Copy" since the formally published edition becomes rapidly out-of-date.

DESCRIPTORS

SUMMARY OF SIGNIFICANT RULES

The rules for the selection of Descriptors in the indexing process are covered in detail in Section VII of the EPM, dealing with "Indexing." The rules for the structuring of new Descriptors not yet in the *Thesaurus* are covered in detail in Section VIII, Part 1 of the EPM, dealing with "Vocabulary Development and Maintenance." Therefore, the rules covered here have been restricted to those pertaining to the data entry of Descriptors.

1. Descriptors used in the indexing process must be in the *Thesaurus of ERIC Descriptors* and must be spelled and spaced exactly as they appear in the most recent Working Copy edition of the *Thesaurus*.
2. Descriptors expressing the "major" subject matters of a document/article must be preceded by an asterisk (*) in order to distinguish them from the less substantial or "minor" topics, and to designate entries for the printed subject indexes.
3. At least one (1) major Descriptor must be assigned to each ERIC record; not more than five (5) major Descriptors are permitted for each record (six if only one or no major Identifier is used). There is, however, no upper limit on the total number of Descriptors that can be used to index a given record; the average for RIE is around eleven (11) per document.
4. Multiple Descriptors are separated by semicolons, followed by a space.
5. If a document is concerned with a particular educational (grade/academic) level, the indexer must provide a Descriptor indexing the document to that level. (See list of mandatory educational-level Descriptors in Figure VII-2).
6. Descriptors are written with initial capital letters. Except when used as the initial word, articles, prepositions, and conjunctions are not capitalized in a Descriptor.
7. Descriptors are written without punctuation or special characters, with the sole exception being parentheses (to enclose a qualifier).
8. Descriptors that duplicate exactly the names of Publication Type categories should not be used as index terms (either Major or Minor) unless the concept is the subject of the document. (and not just its form). (The 22 Descriptors so limited are listed in Figure V-10.)
9. There is no requirement for Descriptors to be entered in any particular order or sequence, i.e., Descriptors do not have to be entered in alphabetic sequence and Major Descriptors do not have to precede Minor Descriptors, or vice versa.

ABSTRACT/ANNOTATION

V.B.13

PROFILE

Data Element/Field	- Abstract/Annotation
Data Entry Tag	- ABST::
Field ID Number (Tape)	- 44
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Mandatory) CIJE (Optional)
Subfields Permitted	- No
Field Length (Experience)	- RIE -21 (Min.); 3,045 (Max.); 1,011 (Av.) CIJE-3(Min.); 720 (Max.); 235 (Av.)
Files	- RIE and CIJE

TYPICAL
ENTRY
(RIE)

ABST::Negative preconceptions about the disadvantaged often hinder the effectiveness of teachers and administrators in schools in culturally depressed areas. Most disadvantaged children are not hostile or unresponsive, nor do they need special discipline. They and their parents often have high, even unrealistic, educational aspirations. Teachers should encourage in the children the self-discipline that leads to academic success, which, in turn, would break the self-fulfilling prophecies of failure. (AA)

TYPICAL
ENTRY
(CIJE)

ABST::Discusses the characteristics of written composition that can be applied to successful speech communication. (HTH)

Abstracts for RIE are preferably of the Informative type, in which the abstract actually contains some of the information transmitted by the document and stands as a small scale substitute for the entire document. Certain kinds of documents require Indicative abstracts, in which the abstract serves as a Table of Contents, telling the user what may be found in the document, but without substantive detail. Mixed Informative/Indicative abstracts are permitted in selected situations. Abstracts are limited to approximately 200 words.

Annotations for CIJE journal articles are not mandatory, but are strongly recommended and should always be prepared whenever the title is not adequately explanatory of the contents of the item. Annotations are limited to approximately 50 words.

ABSTRACT/ANNOTATION

Discussions of the rules and requirements for preparing Abstracts (for RIE) and Annotations (for CIJE) are contained in detail in Section VI of the EPM and should be consulted there. The following rules restrict themselves to matters pertaining to the preparation of the Abstract/Annotation data in machine-readable form and to the kinds of data that should not be in the Abstract/Annotation.

SUMMARY OF SIGNIFICANT RULES

1. Abstracts for RIE documents are to be of the Informative type, whenever the document type permits, and are limited to approximately 200 words.
2. Annotations for CIJE journal articles are limited to approximately 50 words.
3. Do not use hyphens, dashes, or slashes at the end of a line. The computer system assumes a space is appropriate after every word ending a line.
4. Do not use the underline, superscripts, subscripts, or italics. The underline and italics can be substituted for by quotation marks. Superscripts and subscripts must be changed to linear equivalents, e.g.,
— 10^5 = 10 to the fifth power.
—L₁₀ = L sub ten.
5. Do not put non-abstract data in the Abstract. Specifically, the following kinds of information should be avoided in the Abstract and placed instead in the Descriptive Note field, or other appropriate field:
 - Related document references (use NOTE field). When related documents are cited in the Note field it is not necessary to repeat this information in the Abstract (and vice versa).
 - Marginal legibility notes (use NOTE field).
 - Preparing Institution or Sponsoring Agency information (avoid duplicating information already in the INST or SPON fields)
 - Repetition of the Title (avoid duplicating information already in the TITLE field)
6. In general, do not use abbreviations (e.g., state names) in the abstract. However, acronyms, once defined at their initial appearance in the record, may later be used by themselves.
7. Use double parentheses when enumerating a list of items, e.g.:
(1)____; (2)____; (3)____.
8. When doing a list of chapters or papers in an Indicative abstract, take particular care with author names. Authors do not like to have their names misspelled.

ABSTRACT/ANNOTATION

9. At the end of the abstract, place the initials of the abstractor in parentheses, e.g., "(JB)." If an author abstract is utilized, place the word "(Author)" in parentheses at the end of the abstract. Please note that the occasional use, by the abstractor, of the author's terminology in an abstract does not make it an author abstract. If an author abstract is utilized in modified form, use a combination of the two elements in the format "(Author/JB)."
10. Punctuation in the Abstract should be done in accordance with the normal rules of English usage. The semicolon does not function in this field as a subfield delimiter.
11. If the existence of a bibliography in the document is felt worthy of special mention in the abstract, then it is helpful to the user to at the same time indicate the size of that bibliography, e.g., "A 57-item bibliography of additional readings on the topic of autism is appended." If a significant bibliography has not been mentioned in the abstract, but the cataloger feels that it is worthy of note, the information (including size) may be provided via the Descriptive Note field (see EPM, V-133).

**CLEARINGHOUSE INPUT
(OPTIONAL DATA ELEMENTS/FIELDS)**

PERSONAL AUTHOR

V.B.14

PROFILE

Data Element/Field	- Personal Author
Data Entry Tag	- AUTH::
Field ID Number (Tape)	- 27
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- Optional
Subfields Permitted	- Yes (Maximum of 2)
Field Length (Experience)	- 4 (Min.); 64 (Max.); 23 (Av.)
Files	- RIE and CIJE

TYPICAL
ENTRY

AUTH::Burns, James F.; Harris, Walter T.

The entry(ies) in this field should be the name(s) of the person(s) who performed the research and/or wrote the report. If the personal author(s) is (are) not clearly identified by a word such as "Author(s)" or "By," the entry should be determined by selecting a name(s) from the cover, title page, or elsewhere in the report, in the following order of precedence:

- (1) Unaccompanied by any qualifying words, but by location, may be assumed to be the author(s) of the document.
- (2) Identified as the person(s) preparing the document.
- (3) Identified as the principal investigator(s).
- (4) Identified as compiler(s) or editor(s).
- (5) Identified as person(s) submitting the document.

Unless there are other indications that the individual is, in fact, a personal author, omit the author entry if the only person identified is: the project manager; the director or chair of the group doing the work; the school district superintendent; the school principal; the state school superintendent; or the government department head. For example, a superintendent whose name/title automatically appears on the cover or title page of every publication of a school system, should not be interpreted as being the author of every otherwise anonymous such publication. Leave the field blank if no author is identified. Note, however, that documents will usually have either a personal author or a corporate author, or both. Documents without either are extremely rare, especially given the current need to obtain reproduction releases. (For cataloging Corporate Author, see V.B.15.)

PERSONAL AUTHOR

Cataloging of Personal Author names is based on the document in hand. The name (unless it is an obvious typographical error) should be entered as it appears on the document. No attempt should be made to make the author's name consistent across a series of documents, if the series does not reflect such consistency. Errors in spelling discovered after a record has been entered in RIE or CIJE will be corrected whenever reported. However, ERIC does not honor requests for name changes resulting from marital, religious, or ethnic status changes or resulting from consolidation of index entries under one name, etc., after the entry has appeared in RIE or CIJE.

Determining the proper format of unusual names can usually be determined by consulting author listings in the footnotes or bibliography of a document or by using the latest edition of the *Anglo-American Cataloguing Rules*. If still in doubt, call the author(s).

All entries in the Personal Author field appear in the Author Indexes of RIE or CIJE.

Particular care should be taken before selecting names of personal authors from a list of committee/council/conference members or participants. Frequently the chairperson of a committee is the last person listed or the committee is listed in alphabetical order. In the absence of a designated chairperson who serves as editor, compiler, or senior author, the Clearinghouse cataloger should try to determine the correct person(s) to be listed (by personal contact, if necessary), or leave the field blank.

"Senior author" (i.e., usually the first author listed) is a delicate matter in academic circles. Requests to alter or rearrange the authorship sequence on a document do occur. It is adviseable that the Clearinghouse make such alterations only after receiving a written request from the author(s) affected.

Nicknames should be ignored in cataloging, unless they are the only name available, e.g., William A. "Bill" Griffin, Jr. should be cataloged as:

AUTH::Griffin, William A., Jr.

However, "Susie" Frohman should be cataloged as:

AUTH::Frohman, Susie

Authors who occasionally use nicknames are also often found without their nickname. If the nickname were to be picked up in the one case and not in another, the same author would get in the system under two name forms. Also arguing for ignoring nicknames is the fact that the nickname is often simply a more familiar version of one of the earlier-appearing names or initials, e.g., William = "Bill." As authors venture into more formal publishing realms, nicknames tend to get dropped. Ignoring nicknames, therefore, provides the best chance of keeping an author's works together under one name form.

SUMMARY OF SIGNIFICANT RULES

1. Enter personal author names in full (to the extent available on the document), with the last name first, followed by a comma, space, the first name (or initial), space, and the middle initial (or initials, or name). If only initials are available from the document, use the two initials. DO NOT attempt to research a first name. Legitimate qualifiers that are regarded as part of a personal name, such as "Jr." or "II," should be set off by commas, e.g., Gould, John E., Jr.
2. Omit titles, degrees, and other honorifics. However, in the case of religious order bynames, when that is the only name available, add the vernacular title to the byname, e.g., Mary Jeremy, Sister. Omit parentheses around parts of names, e.g., "Martha (Jackson) Brown." Omit any hyphens between first and middle name initials, e.g., "J.-C."
3. Omit names of translators.
4. If the "author(s)" are identified as editor(s) or compiler(s), add a comma and the abbreviation(s), "Ed." or "Comp.," as appropriate, after each name. Do not use the plural forms "Eds." or "Comps."
5. DO NOT use brackets to identify supplied information or to set off editor or compiler notations.
6. No more than two author entries are permitted. They should be sequenced as on the document (i.e., not necessarily in alphabetic order). The first and second entries should be separated by a semicolon (;) and a space. If there are more than two (2) authors, the first entry should consist of the principal author, and the second should be "And Others" (note initial capitals).
7. If an individual is identified as "Editor and Compiler" or "Compiler and Editor," use only the first named identification; do not use both.
8. Authors are cataloged by the name appearing on the document, even if there has later been a name change or a reversion to a maiden name.
9. Authors with the same last name must nevertheless be cataloged individually. The form "Jamison, Harry and Annie" is incorrect.
10. If a document is part of a series and has both an individual editor, and a series editor, catalog only the editor for the individual item. (The series editor should be catalogued only if the entire series itself is catalogued.)
11. Position titles, such as "Project Director," should not accompany personal names in the Personal Author field.

PERSONAL AUTHOR

12. Virtually every RIE document should have either a Personal Author or an Institution (or both). Some person or organization must be responsible for the document. However, note that CIJE has no Institution field and therefore corporate authorship of journal articles (which is rare) can only be described in the Annotation. Do not enter institution names in the Personal Author field.
13. Never use "Anonymous" in the Personal Author field. If no specific name is given, leave the field blank.
14. If two names are listed on the document for the same individual, i.e., George Thompson a/k/a Mowambe Buto or Marsha Twilly a/k/a Marsha T. Jackson, use only the first-cited name. Do not use both names.
15. If the proper format of an unusual name cannot be determined from the document itself (including footnotes, bibliography, etc.), or from contact with the author, consult the latest edition of the *Anglo-American Cataloguing Rules*.
16. Nicknames should be ignored in cataloging, unless they are the only name available. For example, William A. "Bill" Griffin, Jr. should be cataloged simply as AUTH::Griffin, William A., Jr. However, "Susie" Frohman should be cataloged as AUTH::Frohman, Susie.
17. If a personal author is not shown on the original document, but becomes known by the Clearinghouse by reason of correspondence or other such documentation, the personal author name should be cataloged for RIE as verified and should be added to the title page. Brackets may be used on the title page to indicate that the name has been added, if desired, but should not be used in the cataloged data (the only permissible punctuation marks in the personal author field are the comma, period, apostrophe, and hyphen).

EXAMPLES

SINGLE AUTHOR (VARIABLE FIRST/MIDDLE NAMES)

AUTH::Brown, J.
 Brown, J. T.
 Brown, John
 Brown, John T.
 Brown, John T. C.
 Brown, C. John
 Brown, Charles Edward

TWO (2) AUTHORS

AUTH::Brown, John T.; Jones, Mary A.

THREE (3) OR MORE AUTHORS

AUTH::Brown, John T.; And Others

Incorrect are: And others
 and Others
 and others
 And Others. (Note: Do not use the period.)

EDITORS AND COMPILERS

AUTH::Jones, Mary A., Ed.
AUTH::Brown, John T., Jr., Ed.
AUTH::Jones, Mary A., Ed.; Smith, Jane N., Ed.
AUTH::Jones, Mary A; Smith, Jane H., Ed.
AUTH::Jones, Mary A., Comp.
AUTH::Smith, Jane N., Comp.; Jones, Mary A., Comp.
AUTH::Smith, Jane N., Ed.; Jones, Mary A., Comp.

JUNIOR/SENIOR

AUTH::Brown, John T., Jr.
AUTH::Brown, John T., Sr.

II, III, etc.

AUTH::Brown, John T., III

PERSONAL AUTHOR

NAME VARIATIONS*

Ali, Muhammad
Burne-Jones, William
Ching, Francis K. W.
D'Amico, Robert G.
DeAnda, Natividad
deJung, John
de la Rosa, Raul
De Weaver, Norman
de Wolf, Virginia
DiBasio, Anthony J.
Goethe, Johann Wolfgang von
Johnson Smith, Geoffrey
La Bruyere, Rene
La Fontaine, Jean de
Lopes da Silva, Gabriela
MacIntyre, Edward Leon
McDonald, John D.
Monteith, Mary K (middle initial does not stand for anything)
Musset, Alfred de
O'Brien, John P., III
St. Lawrence, Christine Lisa
Stands in Timber, John
Sun, Yat-sen
Tak, Jan van der
Van Puren, Martin

*For unusual personal names, the correct form of which cannot be determined from the document, consult the latest edition of the *Anglo-American Cataloguing Rules* (section on "Headings for Persons").

INSTITUTION

INSTITUTION

V.B.15

PROFILE

Data Element/Field	- Institution
Data Entry Tag	- INST::
Field ID Number (Tape)	- Code: 28 Name: 128
Character Set	- Code: Alphabetic, Numeric Name: Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- Yes
Field Length (Experience)	- Code is fixed length at 8 characters Code - 8 (Min.); 58 (Max.); 9 (Av.) Name - 5 (Min.); 391 (Max.); 62 (Av.)
Files	- RIE only

TYPICAL
ENTRY
(RIE Only)

INST::BBB54321=General Manufacturing Co., Middletown, NY.
Research and Development Div.

The Institution field contains the name of the organization responsible for preparing the document. In library parlance this organization is referred to commonly as the "Corporate Author" or "Corporate Source." Governments and their agencies, societies, associations, institutions, institutes, universities, colleges, companies, commissions, committees, foundations, etc., are all responsible at one time or another for the production or issuance of documents, and the names of these organizations will be entered in this field when their documents are cataloged.

Entry in this field indicates responsibility for the intellectual creation of the document. It is not to be confused with the address of the Personal Author, i.e., the Personal Author's corporate affiliation is not necessarily equivalent to the Corporate Author. ERIC does not at the present time catalog corporate affiliations per se. This issue arises most frequently in the case of personal speeches or conference presentations. No institutional source should, for example, be cataloged for a conference paper written by John Doe of the University of Texas when there is no indication that the release of the paper was formally controlled or supported by the University. Similarly, a

INSTITUTION

Doctoral dissertation or Master's thesis should not be cataloged with the recipient institution as the institutional source. Likewise, commercial publishing companies, college/university presses, the GPO, etc., are not shown as institutional sources when acting merely as publishing agents for works that have normal personal or corporate authors. In such cases, the publisher's name, address, and price are appropriately cataloged in the Availability field (see V.B.21). A commercial publisher can, however, be a corporate author when they are responsible for the actual preparation of a work, e.g., Marquis, Inc., is the corporate author of the reference work *Who's Who in the East*.

Corporate Authors should also not be confused with Sponsoring Agencies. Sponsoring Agencies provide the funding and financial support for efforts that lead to documents. This is usually done via contracts or grants to the Corporate Author. Sponsoring Agencies are generally Government agencies and their names are entered in their own field (see V.B.16).

Neither Corporate Authors nor Sponsoring Agencies are mandatory data elements. A document may be simply the product of an individual operating alone, in which case the INST and SPON fields would both be left blank. However, there are certain clues and interrelationships of which the cataloger should be aware:

- Contract Numbers and Grant Numbers, when present, imply both funding Sponsors and preparing Institutions.
- A Sponsoring Agency implies a recipient of funding and therefore a "doer" (usually an organization, but sometimes an individual).

Organizational names should be established at a level sufficient to trace the document back to its source. Large organizations, e.g., universities, federal agencies, state departments of education, national corporations, etc., must generally cite a relevant subdivision in order to accomplish this. When dealing with organizations of modest size (e.g., small businesses in one city, small school systems, junior/community colleges), however, it is generally not necessary to establish subdivisions.

CIJE does not currently have an Institution field. In those instances where an organization appears as an "author," e.g., "Guidelines for English Teachers," prepared by the National Council of Teachers of English, the cataloger has two alternatives:

- Omit the information altogether.
- Include the information in statements made in the Annotation.

In any case, organization name information should not be included in the Personal Author field.

ERIC Source Directory

The *ERIC Source Directory* is an authority list of organization names to be used in both the Institution and Sponsoring Agency fields.

In order to ensure that the same organization is always cited in the same fashion and to permit ready assembly of consistent printed indexes, all organization names used in the ERIC system are carefully constructed in accordance with Section 2: "Corporate Author" of the *Guidelines for Descriptive Cataloging of Reports*. A Revision of COSATI Standard for Descriptive Cataloging of Government Scientific and Technical Reports (See Attachment 1), and are assigned a unique alphanumeric code. Thereafter, the organization name is entered into the system by specifying the appropriate code. During computer entry of the data, the system extracts the name from the *ERIC Source Directory* on the basis of the code and adds it to the proper record in its standardized form.

All standardized forms are based on the pattern: Largest element—geographic location (City, State, or Country)—smallest element, e.g., "General Electric Co., Huntsville, AL. Computer Dept."

Copies of the *ERIC Source Directory* (showing both names and codes) are distributed to the ERIC Clearinghouses periodically in accordance with annual master schedules. Supplements, listing newly established names and codes, are distributed monthly.

When a Corporate Author is identified for a document, the name of the organization should be looked up in the *ERIC Source Directory*. If it does not appear in the form shown on the document, alternative arrangements of the name should be checked, since the entry on the document may not conform to the standardized name form. The monthly supplements should also be checked for recent entries. Duplicate names, or close variants, should be called to the attention of the ERIC Facility for possible correction. Cataloging should then proceed in accordance with one of the following paragraphs:

Name Found in ERIC Source Directory

One Name: INST::RUF13615=Central State Univ., Wilberforce, Ohio.

Multiple Names: INST::RUF13615=Central State Univ., Wilberforce, Ohio.; BBB16014=NTS Research Corp., Durham, N.C.

NOTE: The data appearing to the right of the code (i.e., "equal" sign, followed by organization name) does not determine what goes into the record, but the cataloger's intended organization name must be on the input form both to permit the ERIC Facility editors to easily check the accuracy of the cataloging and to guard against the possibility of transposed characters in the code. For this reason, the name the cataloger places to the right of the code may be abbreviated and need not agree perfectly with its equivalent in the authority list.

INSTITUTION

Organization name cataloging normally reflects what is on the document. If existing names do not fit the situation, they should not be used. For example, assume the *Source Directory* contains the name "American Association of Junior Colleges" and assume a document comes in bearing the new name of this organization "American Association of Community and Junior Colleges." The cataloger may not use the old name but must request that a new name be established. Name changes, including changes in geographic location, should generally be treated as new names.

New names requested in connection with Level 3 documents (where the ERIC Facility has no document) should be supported by copies of the sheets confirming name, location, etc.

New Name (Not Found in ERIC Source Directory)

If the organization name cannot be located in the *ERIC Source Directory*, the desired name should be entered as follows:

One Name: INST::=Columbus Citizens Advisory Council, OH.

Multiple Names: INST::=Oberlin Coll., OH.; =Saint Mary's Hospital, Grand Rapids, MI.

If only one organization out of a group cannot be found in the *ERIC Source Directory*, make the entries as follows:

INST:::BBB15372=Texas Univ., Austin. Research Inst.;
=Toyota Foundation, Tokyo (Japan).

This format serves as a signal to alert the ERIC Facility to the requirement for a new name/code. If, after review, the new name is found to be justified, it will be added to the *ERIC Source Directory* at the next monthly update.

All new organization names should generally conform to Section 2, "Corporate Author," of the revised COSATI standard referenced to above (see Attachment 1).

When requesting that new institutional names be established, the Clearinghouses should provide complete location information (if not apparent on the document).

SUMMARY OF SIGNIFICANT RULES

1. The Institution data element identifies the organization having responsibility for the intellectual creation of the document. Multiple responsible institutions may be cited, each in its own subfield.
2. All Institution names used must agree with the standard established name forms cited in the *ERIC Source Directory*. Existing names are entered by means of codes that represent the name in the *ERIC Source Directory*. If the name is new and not previously established, it should be formatted generally in accordance with *Guidelines for Descriptive Cataloging of Reports*. Section 2: *Corporate Author*. (See Attachment 1.) All standardized names are based on the pattern: largest element—geographic location—smallest element.
3. Responsible institutions should not be confused with the corporate affiliation of the Personal Author or with the Sponsoring Agency. Corporate affiliation is not cataloged per se.
4. Beginning with the July 1982 issue of RIE, new institutional names began to use the two-character postal codes for states. (Before that time, names were established using the older, longer abbreviations).
5. When dealing with organizations of modest size, it is generally not necessary to establish subdivisions.
6. When requesting that new institutional names be established, the Clearinghouses should provide complete location information (if not apparent on the document).
7. Approved abbreviations for institutional names are listed in Attachment 1 (item 2.4.n). First words of Institution names, however, may never be abbreviated.
8. Entries in the Contract/Grant Number fields or in the Sponsoring Agency field imply the existence of a performing institution. The Institution field should, therefore, generally be cataloged when data are present in these fields.

INSTITUTION

EXAMPLES

ONE INSTITUTION
(LISTED IN
SOURCE DIRECTORY)

INST::RUF13615=Central State Univ., Wilberforce, Ohio.

ONE INSTITUTION
(NEW, NOT LISTED
IN SOURCE DIRECTORY)

INST::=Columbus Citizens Advisory Council, OH.

TWO INSTITUTIONS
(BOTH LISTED IN
SOURCE DIRECTORY)

INST::RUF13615=Central State Univ., Wilberforce, Ohio.;
BBB16014=NTS Research Corp., Durham, N.C.

TWO INSTITUTIONS
(BOTH NEW)

INST::=Oberlin Coll., OH.; =Saint Mary's Hospital,
Grand Rapids, MI.

TWO INSTITUTIONS
(ONE LISTED IN
SOURCE DIRECTORY;
ONE NEW)

INST::BBB15372=Texas Univ., Austin. Research Inst.;
=Toyota Foundation, Tokyo (Japan).

Editor's Note:

Previous editions of the COSATI standard cited older and longer forms of state name abbreviations and these were followed by ERIC for many years and are reflected in the ERIC Source Directory. Beginning with the July 1982 issue of RIE, ERIC shifted to the now standard two-character postal abbreviations, and all organization names established after that date use the new abbreviations. It is hoped that future editorial projects will make possible the conversion of all the old abbreviations to the new forms.

SPONSORING AGENCY

V.B.16

PROFILE

Data Element/Field	- Sponsoring Agency
Data Entry Tag	- SPON::
Field ID Number (Tape)	- Code: 32 Name: 132
Character Set	- Code: Alphabetic, Numeric Name: Alphabetic; Numeric, Special
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- Yes
Field Length (Experience)	- Code is fixed length at 8 characters Code - 8 (Min.); 58 (Max.); 9 (Av.) Name - 5 (Min.); 378 (Max.); 68 (Av.)
Files	- RIE only

TYPICAL
ENTRY
(RIE Only)

SPON::BBBB98765=National Research Agency, Washington, DC.
Biological Programs Div.

A Sponsoring Agency is defined as an organization (e.g., government agency, private foundation, etc.), other than the Corporate Author, that supported the work (or the production of the document) by providing funds via contract or grant. Names entered in this field must either come from the *ERIC Source Directory*, or, if new, must be constructed according to the COSATI standard appearing as Attachment 1. The instructions and examples for entering organization names that appear in V.B.15, dealing with the Institution data element, also apply to the entry of Sponsoring Agencies.

All documents bearing a contract or grant number should generally have a corresponding entry in the Sponsoring Agency field. Particular care should be taken, however, to ensure that all reports resulting from contracts or grants funded by the Department of Education (ED), or one of its subunits (e.g., National Inst. of Education), have an entry in this field.

HISTORICAL NOTE: The National Institute of Education (NIE) became part of the Department of Education (ED) at the inauguration of that Department in May 1980. Before that time, NIE was part of the Department of Health, Education, and Welfare (DHEW). NIE documents not bearing a Departmental designation by name or contract number should be assigned to DHEW or ED name forms based on the May 1980 date. The same argument holds for all such problems created by governmental reorganizations.

SUMMARY OF SIGNIFICANT RULES

1. The Sponsoring Agency data element identifies the organization(s) that has funded the effort reported in the document. Multiple sponsors may be cited, each in its own subfield.
2. All organizations cited as funding sources should be cataloged in the Sponsoring Agency field. However, if there is a principal funding source and many secondary funding sources, the catalogers, at their discretion, may choose to catalog only the principal sponsor. Sponsors whose help is only "collaborative," "coordinative," "supportive," (i.e., only nominal) need not be cataloged.
3. All Sponsoring Agency names used must agree with the standard established name forms cited in the *ERIC Source Directory*. Existing names are entered by means of codes that represent the names in the *ERIC Source Directory*. If the name is new and not previously established, it should be formatted generally in accordance with *Guidelines for Descriptive Cataloging of Reports, Section 2: Corporate Author*. (See Attachment 1.) All standardized names are based on the pattern: largest element—geographic location—smallest element.
4. Sponsoring Agencies should not be confused with preparing institutions (See V.B.15) or Personal Author's corporate affiliation (not cataloged per se).
5. Entries in the Contract/Grant Number fields generally require a corresponding entry in the Sponsoring Agency field. Particular care should be taken to ensure that all reports resulting from Department of Education funding have an entry in this field.
6. Beginning with the July 1982 issue of RIE, new institutional names established began to use the two-character postal codes for states. (Before that time, names were established using the older, longer abbreviations.)
7. Organizations that perform the functions of both Sponsor and preparing Institution are listed only once, under Institution. Do not list the same organization in both the Institution and Sponsoring Agency fields.
8. All Research and Development Utilization (RDU) materials should cite NIE as the Sponsoring Agency.

EXAMPLES

See the examples provided under the Institution data element (V.B.15).

REPORT NUMBER

V.B.17

PROFILE

Data Element/Field	- Report Number
Data Entry Tag	- REPNO::
Field ID Number (Tape)	- 45
Character Set	- Alphabetic, Numeric, Special (Hyphen, Slash, Parentheses)
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- Yes
Field Length (Experience)	- 12 (Av.)
Files	- RIE only

TYPICAL
ENTRY
(RIE Only)

REPNO::ASD-TR-63-24

Report Numbers are the unique alphanumeric designations assigned to the documents by the preparing organizations, sponsoring agencies, or major report processing centers. Though most documents will have only one report number (if any at all), report numbers of all three types of organizations mentioned above may, in some cases, appear on the same document and should be recorded.

Report Numbers can be troublesome to catalog because they appear on documents in so many variant formats. The *Dictionary of Report Series Codes** can be helpful in determining standardized formats for given series. Also of use is the ERIC *Report Number Index*, a cumulative record of all Report Numbers used to date in the ERIC data base.

Cataloging Report Numbers• Hyphens for Spaces

Many Report Numbers appear on the report in an easily indexable form, consisting of letters, representing the originating or monitoring agency, followed by a unique number. The only editing required for such a number is to insert a hyphen wherever a space appears, in order to assure uniformity in machine sorting. For example:

ASD-TDR-63-24 CCHE-1019 AGDEX-900-014 UCRL-1035

*Available from: Special Libraries Association (SLA), 235 Park Avenue South, New York, NY 10003.

REPORT NUMBER

Other Report Numbers consist of a combination of letters and numbers, but the letters do not represent the originating or monitoring agency. Enter such numbers as they are given on the report, inserting a hyphen wherever a space appears, but otherwise retaining the punctuation. For example:

R64D61 RR-17 RM-4244

Note, however, that no final punctuation is used with Report Number prefixes (i.e., ASD, not A.S.D.) nor at the end of the number.

● Descriptive Words Within the Number

Many Report Numbers include descriptive words within the number; these words may either be ignored or abbreviated. The words are ignored when the numbers form one distinct series from the given organization regardless of the descriptive words; they are abbreviated when there are two or more series of documents from the same organization, each associated with a specific group of words.

Example: DHEW Publication No. ADM-78-485

Incorrect: DHEW Publication ADM-78-485
Correct: DHEW-ADM-78-485

Example: NASA Technical Memorandum 455
NASA Technical Report 170

Correct: NASA-TM-455
 NASA-TR-170

● Non-Distinctive Report Numbers

If a Report Number has a distinctive alphabetic prefix, it should be cataloged solely in the Report Number field and should not appear in the Title field. If no distinctive prefix can be ascertained, a Report Number may be included as an element of the title/subtitle. A good example of this type might be a subtitle such as "Interim Report No. 2," serving to distinguish between the other interim reports (or Final Report) probably otherwise bearing the same substantive title.

● Abbreviations

Certain standard words frequently used to refer to reports and documents and often found in spelled-out form may be routinely abbreviated. A list of some of the more common abbreviations appears in Figure V-14. Longer lists may be found in the reference cited at the beginning of this section.

Accession List	= AL	Number	= No
Addendum	= Add	Pamphlet	= Pam
Amendment	= Amend	Part	= Pt
Annual Report	= AR	Progress Report	= PR
Appendix	= App	Project	= P
Bibliography	= Bib	Public Law	= PL
Book	= Bk	Publication	= Pub
Bulletin	= Bull	Research Memorandum	= RM
Catalog	= C	Research Note	= RN
Chapter	= Ch	Research Paper	= RP
Circular	= Circ	Revised, Revision	= Rev
Conference	= Conf	Section	= Sect
Conference Paper	= CP	Series	= Ser
Contractor Report	= CR	Special Report	= SR
Contribution	= Contrib	Specification	= Spec
Document	= Doc	Summary	= Summ
Edition	= Ed	Supplement	= Suppl
Evaluation Report	= ER	Technical Memorandum	= TM
Final Report	= FR	Technical Note	= TN
Informal Communication	= IC	Technical Publication	= TP
Internal Memorandum	= IM	Technical Report	= TR
Leaflet	= L	Technical Translation	= TT
Laboratory Note	= LN	Translation	= Trans
Memorandum	= M	Volume	= Vol
Memorandum Report	= MR	Working Paper	= WP
Miscellaneous Paper	= MP		

FIGURE V-14: ABBREVIATIONS COMMONLY USED IN REPORT NUMBERS

REPORT NUMBER

Note that the word "report," when appearing alone on a document, may generally safely be ignored, and replaced by a hyphen.

Example: Naval Air Training Command Report 5914

Incorrect: NATC-R-5914

Correct: NATC-5914

However, if the preparing organization is large and has many report series, then it is best to abbreviate "report" to "R." If the standard abbreviation for "report" (i.e., "R") actually appears on the document, then it should always be retained and used in the Report Number.

Roman numerals in report number abbreviations should be changed to the Arabic form, for filing purposes. For example:

Incorrect: RDR-65-6-XII

Correct: RDR-65-6-12

If a single Report Number is issued in several parts, this information is added to the Report Number in abbreviated form, using hyphens, not commas or parentheses, for separation. For example:

ARC-11767-Vol-2

• Forming Valid Report Number Prefixes

Some reports are published in a definite numbered series, with a standard phrase always describing the series, but lacking, on occasion, any initials or acronym. In such instances, the phrase may be abbreviated if it can be established that:

- (1) the prefix is used at times by the organization in question, or that
- (2) the prefix has become commonly associated with the organization.

In other words, there should be some precedent in usage, either in previous documents of the same organization or in reference works such as that cited at the beginning of this section. Avoid creating complicated Report Number prefixes that have never at any time actually appeared on documents. Such creations can be bibliographic "red herrings," sometimes misleading and troublesome to librarians and other users.

Example: Visual Training Laboratory Report No. 65

Correct: VTL-65

- Multiple Report Numbers

If there is more than one Report Number for a document, the additional numbers should be entered following the first number, but separated by a semicolon and a space.

REPNO::ETS-RB-78-12; ETS-RB-78-14

Report Numbers in sequential series on one accession should be individually entered, as follows:

REPNO::S-493; S-494; S-495

Do not elide them in the following format, as this will prevent their individual appearance in the *Report Number Index* and in computer retrieval files.

Incorrect: REPNO::S-493—495
REPNO::S-493 thru 495

- Report Numbers Assigned by Major Report Processing Centers

Major information and document processing centers sometimes assign accession numbers that are later so useful in identifying, requesting, and utilizing documents that they are best treated as Report Numbers and captured at cataloging time. On occasion, through arrangement with the source, these numbers may actually be printed on the document at the time of original issuance. Even when this is not done, most of the copies of such documents in circulation will be those reproduced by the major information centers and therefore bearing the well-known accession numbers. Examples of major accession numbers that should be treated as Report Numbers are as follows:

Defense Technical Information Center (DTIC) AD-

National Technical Information Service (NTIS) PB-

NASA Scientific and Technical Information Facility N82-

The ERIC ED and EJ Accession Numbers also belong to this category and are often cited as, in effect, Report Numbers, by later handlers and processors.

- Congressional Documents

The principal type of Congressional documents acquired by ERIC are Hearings and Committee Prints, and these do not have Report Numbers. However, occasionally ERIC processes formal House and Senate Reports and Documents. Since these four series bear within their structure the identification of the particular Congress involved (e.g. 92nd, 95th, etc.) it is only necessary when recording the number to distinguish Reports from Documents.

REPORT NUMBER

House Reports	House-R-92-898
House Documents	House-Doc-96-167
Senate Reports	Senate-R-91-480
Senate Documents	Senate-Doc-94-258

House or Senate Bills are processed only rarely, but since their numbering scheme begins anew with each Congress, it is necessary to qualify them with the identification of the Congress if they are to be unique.

House Bills	HR-11267(92)
Senate Bills	S-2951(72)

• **Miscellaneous**

Public Laws

Public Laws are documents and can be entered into the system. The Public Law number should be treated as an identifying Report Number and should be entered as follows: REPNO::PL-92-415.

International Standard Book Numbers (ISBN)

International Standard Book Numbers (ISBN) are unique numbers assigned by the publishing industry to the products they sell: They appear in catalogs and are frequently used as order numbers. They should be treated as identifying Report Numbers and should be entered as follows: REPNO::ISBN-0-8352-1173-8. Sometimes a work will cite multiple ISBN's for its different editions and forms. Only the ISBN for the work in hand should be cited.

International Standard Serial Numbers (ISSN)

International Standard Serial Numbers (ISSN) are assigned to journals, periodicals, and all types of serial publications. All the issues of a given serial bear the same ISSN number and therefore it does not provide a unique identification for the piece (issue) in hand. For this reason, ISSN numbers should not be picked up as Report Numbers for individual articles or journal issues, but should be picked up if the entire journal as a whole is being cataloged.

The ISSN for RIE is: 0098-0897

The ISSN for CIJE is: 0011-3565

These are generally recorded on the journals themselves without the hyphen after the ISSN prefix (e.g. ISSN 0098-0897), but this convention should not be followed when treating them as Report Numbers in citations, in which case they would appear as "ISSN-0098-0897" and "ISSN-0011-3564."

Catalog of Federal Domestic Assistance (CFDA)

CFDA stands for Catalog of Federal Domestic Assistance. The number that is associated with the acronym, e.g., "CFDA: 13.433A," refers to a citation in that catalog that describes in detail a funding program, supporting legislation, eligibility, etc. The number is not document specific and should not be construed as a Report Number, or Contract or Grant number. It can safely be omitted in cataloging.

SUMMARY OF SIGNIFICANT RULES

1. All unique identifying Report Numbers on the document should be cataloged, whether placed there by the preparer, sponsor, or processor.
2. Alphabetic prefixes (many of which will be based on the initials of the preparing organizations), should always be sought for Report Numbers in order to distinguish one number from another. Arabic numbers alone are not useful in indexes or for searching.
3. Commonly-appearing words in Report Numbers should be abbreviated, e.g., Technical Report = TR; Research Paper = RP. Lists of such words and their abbreviations are provided for guidance (See Figure V-14).
4. Roman Numerals appearing in Report Numbers should be converted to Arabic numerals, for filing purposes.
5. Multiple Report Numbers must be entered individually, each in its own subfield, to ensure retrievability of each number.
6. Treat International Standard Book Numbers (ISBN's) like any other identifying number and record them in the Report Number field (for retrieval purposes).
7. International Standard Serial Numbers (ISSN's) are assigned to serial publications and are repeated on all issues. They are, therefore, not unique identifying numbers and should not be cataloged as Report Numbers (unless an entire journal, as a whole, is being cataloged).
8. Blank spaces are not permitted in Report Numbers. Report Numbers should be "standardized" by replacing all spaces with hyphens.

REPORT NUMBEREXAMPLES

PREPARING INSTITUTION NUMBER	Johns Hopkins Univ., Applied Physics Lab.	JHU-APL-
SPONSORING AGENCY NUMBER	Air Force Office of Scientific Research	AFOSR-
REPORT PROCESSING CENTER NUMBER	National Technical Information Service Defense Technical Information Center NASA Scientific and Technical Information Facility	PB- AD- N82-
INTERNATIONAL STANDARD BOOK NUMBER		ISBN-
PUBLIC LAW		PL-95-264
CONGRESSIONAL DOCUMENTS		House-R-99-898 House-Doc-96-167 Senate-R-91-480 Senate-Doc-94-258
USE OF YEAR		
IN NUMBER IN PREFIX	Rand Corp. Annual Report NASA Scientific and Technical Information Facility	Rand-AR-(Year) N82-
ROMAN NUMERALS (CONVERTED)	INCORRECT: RDR-65-6-XII	CORRECT: RDR-65-6-12
MIX OF UPPER AND LOWER CASE	Human Resources Research Organization	HumRRO-PP-10-78
VOLUMES, PARTS, ETC.		ARC-11767-Vol-2
USE OF SLASHES		
IN PREFIX IN NUMBER	Coast and Geodetic Survey —	C/GS- TT-76-53000/3

CONTRACT NUMBER

CONTRACT NUMBER

V.B.18

PROFILE

Data Element/Field	- Contract Number
Data Entry Tag	- CONT::
Field ID Number (Tape)	- 46
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- Yes
Field Length (Experience)	- 3 (Min.); 70 (Max.); 14 (Av.)
Files	- RIE only

TYPICAL
ENTRY
(RIE Only)

CONT::NE-C-00-3-0051

The Contract Number is the alphanumeric identifier assigned by the sponsoring agency to designate the financial support given the work or research reported in the document. If the Contract Number does not appear in the document, it may be supplied by the cataloger, if the information is readily available from another reliable source. However, research by the cataloger for this purpose is optional.

All Contract Numbers that appear on documents accessioned for input to RIE are to be cited in the Contract Number field*. Most Contract Numbers will have alphabetic prefixes serving to identify the sponsoring agency; these should be captured whenever available as they serve both to identify the Contract Number as to its source and to group together in printed indexes the various Contract Numbers of the same agency.

However, since some U.S. Government agencies have contract numbering systems that do not involve alpha prefixes, it is necessary to permit also the capture of Contract Numbers that are purely numeric. The general rule is to capture the Contract Number as it appears on the document.

If an identifying number on a document cannot reasonably be determined to be a Contract Number, it should not be cataloged as such.

Do not use the word "Contract." This call-out will be inserted in the RIE announcement by the computer system.

*Through June 1976 (ED-118 719), the Contract Number field was restricted to OE and NIE contracts only.

CONTRACT NUMBER

Patterns in Government Contract Numbers

There are various patterns in Government Contract Numbers that if known can help simplify the job of cataloging them.

Contract Numbers from the old Office of Education (OE) either have the prefix OEC- or begin with a number between 300-399. Typical entries are:

CONT::OEC-4-6-060723
CONT::300-78-0211

Contract Numbers from the National Institute of Education (NIE) have either the prefixes NE-C- or NIE-C-, or begin with a number between 400-499. Typical entries are:

CONT::NE-C-00-3-0051
CONT::NIE-C-74-0015
CONT::400-75-0025

Examples of some non-NIE Contract Numbers, showing identifying prefixes, are as follows:

CONT::LEAA-J-IAA-030-6
CONT::DOT-HS-6-01336
CONT::NSF-C-1052

However, Government agencies do not remain static. They come and go with reorganizations. Similarly, the contract numbering systems of these agencies have limited lifetimes. It is not the cataloger's function to keep abreast of these systems, but rather to simply record the resultant numbers as they appear on documents.

Purchase Orders and Cooperative Agreements

Purchase Order Numbers, i.e., P-80-605, are not Contract or Grant Numbers and, because they lack the continuity of such numbers, need not be captured during cataloging. That does not mean, however, that the appropriate sponsorship should not be cataloged. Legitimate sponsors should always be cataloged in the SPON field.

Cooperative Agreements, if deemed by the cataloger to be of potential interest to the user, can be referred to in the NOTE field. The parties to the agreement would simply be entered in the INST field. Any number associated with the agreement may be incorporated in the Note and need not be treated as a Contract or Grant Number.

SUMMARY OF SIGNIFICANT RULES

1. Catalog any and all Contract Numbers appearing on the document.
2. Multiple Contract Numbers must be separated by a semicolon and a space.
3. Alphabetic prefixes identifying the sponsoring agency are desirable and should be cataloged when available. To determine the validity of certain possible prefixes it is helpful to consult the prior usage recorded in the ERIC Contract Number Index.
4. Do not confuse Grant Numbers, Project Numbers, and Report Numbers with Contract Numbers.
5. Contract Numbers may occasionally appear on certain kinds of documents (e.g., speeches, conference papers) for which no preparing institution or sponsoring agency is given. This fact should not prevent the cataloger from capturing the valid Contract Number information that is available. However, under normal circumstances a Contract Number implies both a preparing institution and a sponsor, and the cataloger should make an effort to identify both.
6. The parts of a Contract Number should be separated from each other by hyphens (unless the Contract Number specifically uses another special character, such as a slash). Blank spaces in a Contract Number should be replaced by hyphens.
7. Generalized statements of financial support or sponsorship should not be entered in the Contract Number field, but rather described in the NOTE field if felt by the cataloger to be significant, e.g., "NOTE:: Sponsored by the civil rights offices of five western states."
8. NIE contracts in the 400 series do not carry a prefix and should be recorded in the form "400-76-0116" regardless of how they appear on the document. In the case of other federal agencies where ERIC catalogers do not have the benefit of special knowledge, it is best to simply follow the form cited on the document.

CONTRACT NUMBER

EXAMPLES

SINGLE CONTRACT NUMBER

CONT::N00014-79-C-0323

MULTIPLE CONTRACT NUMBERS

CONT::NE-C-00-3-0051; NE-C-00-3-0052

CONTRACT NUMBER WITH
ALPHA PREFIX

CONT::DOT-HS-6-01336

CONT::HEW-105-78-1300

CONT::HRA-231-76-0032

CONTRACT NUMBER WITHOUT
ALPHA PREFIX

CONT::400-79-0060

GRANT NUMBER

V.B.19

PROFILE

Data Element/Field	- Grant Number
Data Entry Tag	- GR::
Field ID Number (Tape)	- 47
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- Yes
Field Length (Experience)	- 3 (Min.); 85 (Max.); 16 (Av.)
Files	- RIE only

TYPICAL
ENTRY
(RIE Only)

GR::NE-G-00-3-0006

Grant Numbers are similar to Contract Numbers in function and purpose. They are alphanumeric tags representing instruments through which financial support was given the work or research reported in documents. (The distinction is that the scope of work of a grant is broader and more general and usually does not contain lists of specific tasks and deliverables. A contract, on the other hand, usually carefully specifies certain tasks or contract-deliverable items, and the contracting agency monitors the effort and follows up to see that all contractual obligations are met).

If the Grant Number does not appear on the document, it may be supplied by the cataloger, if the information is readily available from another reliable source. However, research by the cataloger for this purpose is optional. Grant Numbers imply a sponsoring agency. If a Grant Number appears on a document, the cataloger should make an effort to find the sponsoring agency to which the grant number applies.

All Grant Numbers that appear on documents accessioned for input to RIE are to be cited in the Grant Number field.* Most Grant Numbers will have alphabetic prefixes serving to identify the Grant Number as to its source and to group together in printed indexes the various Grant Numbers of the same agency. However, since some agencies may have or may develop grant numbering systems that do not involve alpha prefixes, it is necessary to permit also the capture of Grant Numbers that are purely numeric. The general rule is to capture the Grant Number as it appears on the document.

*Through June 1976 (ED-118 719), the Grant Number field was restricted to OE and NIE grants only.

GRANT NUMBER

If an identifying number on a document cannot reasonably be determined to be a Grant Number, it should not be cataloged as such.

Do not use the word "Grant." This call-out will be inserted in the RIE announcement by the computer system.

Patterns in Government Grant Numbers

There are various patterns in Government Grant Numbers that if known can help simplify the job of cataloging them.

Grant Numbers from the old Office of Education (OE) have either the prefix OEG- or G. Typical entries look as follows:

GR::OEG-4-6-000516
GR::G007703050

Grant Numbers from the National Institute of Education (NIE) have as a prefix NE-G-, NIE-G-, or OB-NIE-G-, as follows:

GR::NE-G-00-3-0006
GR::NIE-G-74-0025
GR::OB-NIE-G-78-0203

Examples of some non-NIE Grant Numbers, showing identifying prefixes, are as follows:

GR::PHS-G-HE-09564
GR::CLR-645
GR::SIS-75-16262

However, Government agencies do not remain static. They come and go with reorganizations. Similarly, the grant numbering systems of these agencies have limited lifetimes. It is not the cataloger's function to keep abreast of these systems, but rather to simply record the resultant numbers as they appear on documents.

SUMMARY OF SIGNIFICANT RULES

The rules for cataloging Grant Numbers are essentially the same as those for cataloging Contract Numbers (V.B.18).

EXAMPLES

SINGLE GRANT NUMBER: GR::NSF-G-18690

MULTIPLE GRANT NUMBERS: GR::NIMH-G-24859; PHS-G-HD-04038

V.B.20

DESCRIPTIVE NOTE

PROFILE

Data Element/Field	- Descriptive Note
Data Entry Tag	- NOTE::
Field ID Number (Tape)	- 38
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Optional) CIJE (Optional)
Subfields Permitted	- No
Field Length (Experiance)	- 47 (Av.)
Files	- RIE CIJE (Since January 1984, EJ 286-201)

TYPICAL ENTRY

NOTE::Paper presented at the National Conference for Associate Degree Programs in Nursing (3rd, St. Louis, MO, March 4-5, 1966).

The Descriptive Note field is a catch-all field intended to contain cataloger's notes that extend the description of the document or journal article, and communicate miscellaneous essential information to the user. If a cataloger wishes to communicate any information not provided for by the other fields, it is entered in this field.

While Notes are wide-ranging in what they may deal with, there are nevertheless certain recurring types that can be exemplified here:

- Papers presented at..., Speeches, Reprints, etc. (the circumstances under which the document was prepared; conference presentation information)
- Dissertations, Theses, Practicum Papers
- Related Documents (Including Analytic "Parents")
- Legibility Problems
- Copyrighted Segments of Documents
- Size of Bibliography
- Translated by...
- "In" notes, for papers extracted from collections and entered into the system individually
- Journal availability information, e.g., publisher addresses for obscure "oneshot" journals (CIJE usage)
- "Theme" name when articles are being cataloged from a journal issue that has an overall "theme" for that issue.

DESCRIPTIVE NOTE

Punctuation in this field should be done in accordance with the normal rules of English usage, e.g., independent thoughts should be separated with a period; closely related thoughts may be separated by a semicolon. In this field the semicolon does not function as a subfield delimiter and may be used as a normal element of punctuation.

Papers presented at..., Speeches, Reprints

NOTE::Paper presented at the National Conference for Associate Degree Programs in Nursing (3rd, St. Louis, MO, March 4-5, 1966).

NOTE::Speech given before the National Conference on Higher Education (22nd, Chicago, IL, March 7, 1967).

NOTE::Reprint from Proceedings of the Annual Conference of the American Sociological Association (Toronto, Ontario, Canada, August 24-28, 1981).

NOTE::Paper presented at the combined Annual Meeting of the Midwest Popular Culture Association and the Midwest American Culture Association (Kalamazoo, MI, October 23-25, 1980).

NOTE::Paper presented at the Meetings of the International Communications Association Telecommunications Conference '81 (Washington, DC, June 1, 1981) and the Oregon Association of Broadcasters (Newport, OR, June 12, 1981).

Conference number, place, and date should always be placed in parentheses, in the standardized format shown, after the conference name. Domestic meeting locations should be cited using the standard two-character postal codes for states. Foreign meeting locations should always cite the country and city.

Dissertations, Theses, Practicum Papers

NOTE::Ph.D. Dissertation, University of Connecticut.

NOTE::Ed.D. Dissertation, Temple University.

NOTE::Doctoral Dissertation, University of Maryland.

NOTE::Ed.D. Practicum, Nova University.

NOTE::Master's Thesis, Yale University.

NOTE::M.L.S. Thesis, Drexel University.

NOTE::M.S. Thesis, Stanford University.

NOTE::Requirements for..., Oregon State University.

All such notes should be expressed as briefly as possible.

DESCRIPTIVE NOTE

Related Documents (Including Analytic "Parents")

If it is desirable for any reason to refer to other documents related to the one in hand, the reference should be entered in the Descriptive Note field, as follows:

NOTE::For related documents, see TM 002 488-489.

Related documents may be other volumes in a multiple volume set, other volumes in the same series, other volumes on the same project, appendices to a given report, other papers emanating from the same conference, etc. References to related documents should be made judiciously and should not attempt to cover an excessive number of documents.

Whenever possible, the ED number of the related document should be cited rather than the Clearinghouse Accession Number. However, when the items are all in the same issue of RIE, the ED number is not known at the time the description is being prepared and therefore the Clearinghouse Accession Number must be used. It is acceptable to cite a mix of Clearinghouse Accession Numbers and ED Accession Numbers, citing earlier items first. Do not cite a number to be included in a future issue of RIE since if the announcement did not materialize the reference would be "blind."

NOTE::For related document, see ED 123 456.

NOTE::For related document, see ED 142 376 and CE 001 406-409.

A major use of this type of note is with respect to Analytics (i.e., documents that have been treated both as a whole and as a group of individual parts each entered into the system separately). The "Parent" document should always carry a Descriptive Note referring to the analyzed parts. If the analyzed parts are also available separately, the note referring from part to "Parent" should also be in this field. However, it is most common that the parts are not available separately and in these cases the note from part to "Parent" is placed in the Availability field (because it relates to the availability of the part).

Parent to Parts NOTE::For related documents, see TM 123 455-460.

Part to Parent
(Part available
separately) NOTE::For related document, see TM 123 454.

Part to Parent
(Part not
available
separately) AVAIL::Not available separately; see TM 123 454.

In the case of a sequential group of related documents, the "related document" note should be written in compressed form and may refer to itself as part of the sequence, e.g., for the note to be included on TM 123 458:

CORRECT: For related documents, see TM 123 456-460.

INCORRECT: For related documents, see TM 123 456-457, and TM 123 459-460.

DESCRIPTIVE NOTE

Analytics and their parts should always be contained within one issue of RIE and should not be spread across more than one issue.

Please note how accession numbers should be written when they are referred to as "related documents."

Incorrect: ED140204
ED 140,204
ED-140-204

Correct: ED 140 204

However, do not compress when the series referred to has gaps.

Incorrect: RC 012 394, 995

Correct: RC 012 994 and RC 012 996

Legibility Problems

Documents that contain material of marginal legibility that may not reproduce satisfactorily may, at the discretion of the cataloger, have a note added alerting the user to such material. If the document has been assigned Level 2 (i.e., no paper copy) because of such material, then a note must be added explaining the situation.

Level 1 **(Optional Note)** **NOTE:** Several figures may not reproduce well due to marginal legibility.

NOTE: Appendix C contains photographs that may not reproduce clearly.

Level 2 NOTE::Contains many pages of small, broken type.
(Mandatory Note)

NOTE::Printed in colored ink on colored paper.

Since the EDRS Price field for Level 2 documents contains the statement "Paper copy not available from EDRS," it is not necessary to repeat this information in the NOTE field.

All legibility notes should be expressed as briefly as possible.
Additional examples are as follows:

- Appendixes may not reproduce clearly.
 - Charts/figures may not reproduce clearly.
 - Print marginally legible.

TOO LONG NOTE:: Some of the figures and tables in part C may not reproduce well due to small and broken type.

IMPROVED NOTE:: Several pages in part C may be marginally legible.

or

Several pages in part C may not reproduce clearly.

TOO LONG NOTE:: Figure 3, page 13 (Sample: Student Station Utilization Chart) and Figure 4, page 14 (Sample Data: Student Station Utilization) may not reproduce well due to marginal legibility of original.

IMPROVED NOTE:: Several figures may not reproduce well due to marginal legibility.

Copyrighted Segments of Documents

If a document has been made available for Level 1 processing by eliminating a copyrighted portion, an entry must be made in the Descriptive Note field in one of the following formats:

NOTE:: Pages 121-143 of the original document are copyrighted and therefore not available; they are not included in the pagination.

NOTE:: Pages 64, 66, and 68 of the original document are copyrighted and therefore not available; they are not included in the pagination.

Size of Bibliography

If the document is a bibliography, generally the abstract will note its size and other important characteristics. However, if a document merely contains a large bibliography or extensive set of references, the quantity of these is not always mentioned in the abstract. In such cases, at the discretion of the cataloger, they may be mentioned in the Descriptive Note field.

NOTE:: Supporting bibliography of 413 references.

Translated by...

The translators of works having their own Personal Author are not cataloged in the Personal Author field. If it is felt useful to record the name of the translator for the benefit of the user, the information should be cataloged in the Descriptive Note field, as follows:

NOTE:: Translated by Pyotr Kasparov.

DESCRIPTIVE NOTE

Journal Availability (for Obscure Journals)

Journal publisher/availability information for the less well known and more difficult to obtain journals that are not listed in the Source Journal Index (i.e., "oneshot" journals may be useful information to pass along to the user. Between 1969-1983, CIJE did not have a Note field and information of this type was added to the annotation. Beginning with January 1984, this information was placed in the newly-added Note field. An example follows:

NOTE::Journal published by the English Department,
Gallaudet College, Washington, DC 20002.

"Theme" Name for Journal Issues Having a Theme

If an article is being extracted from a journal issue that has an overall theme for the entire issue, then the theme information may be placed in the Note field if in the judgment of the cataloger it would be potentially useful to users. An example follows:

NOTE::Theme issue with title "South America Today."

"In" Notes

Occasionally individual papers or chapters are analyzed out of larger documents that themselves may or may not be going into the system. The cataloger records the specific title and author of the analyzed paper, but needs to also put the paper in context by referring to the larger work of which it is a part. This is best done by an "In" or "In its" note. The "In" note references the title, author and/or institution, series and/or publication date of the larger work. If the institution of the part is the same as that of the larger work, an "In its" note may be used, avoiding duplication of the institution reference. Examples follow:

NOTE::I:1: The Collected Teachings of Confucius. Oxford, Clarendon Press, 1981. v5, p79-124.

NOTE::In: Brown, James, Comp. Selections from Famous Diaries. New York, Decker Press, 1980. p240-259.

NOTE::In its: Papers and Reports on Child Language Development, Number 15, p160-169, Aug 1978.

NOTE::In its: Workpapers in Teaching English as a Second Language, Volume XIII, p69-102, Dec 1979.

Extracts, Summaries, Derivations, etc. from Larger Documents

ERIC Digests are often attempts to "boil down" much larger documents to a one- or two-page format. A problem arises for the cataloger of an ERIC Digest as to how to reference the larger document being winnowed down.

In general, the best place to put this information is in the NOTE field. Since the process of shortening the larger document is done in different ways, it is often best to use the same language as the creators of the Digest. Some examples follow:

NOTE::Based on "Education and Society," by John Jones, see ED 123 456.

NOTE::Excerpted from "Education and Society," by John Jones and others, see ED 123 456.

NOTE::Derived from "Education and Society," by John Jones and Mary Smith, see ED 123 456.

NOTE::Summarized from "Education and Society," by John Jones, and others, see ED 123 456.

On occasion, the information of this nature may be so detailed or lengthy, or so closely related to other information contained in the Abstract, that it becomes simply too much for the NOTE field and is better incorporated in the ABST field. An example of such a message is as follows:

ABST::This ERIC Digest summarizes advice for improving parent/teacher communication contained in three documents prepared by John Jones of Central Midwestern University: (1) AAAAA (ED 123 456); (2) BBBBB (ED 234 566); and (3) CCCCC (ED 345 678). Jones' studies lead him to believe that....

Whether the information is placed in the NOTE field or in the ABST field, it should be kept as short, simple, and direct as possible.

Historical Notes:

Language

From 1966 through 1978, the language of non-English language documents was described in the Descriptive Note field, e.g., "In French." Beginning with the January 1979 issues of RIE (ED 157 988) and CIJE (EJ 186 218), the language(s) of documents has been indicated only in the Language field (V.B.10).

CIJE

From 1969 through 1983, the Descriptive Note was not used by CIJE. Its use with EJ records was initiated with the January 1984 issue (EJ 286 201).

SUMMARY OF SIGNIFICANT RULES

1. The Descriptive Note field is intended as a place to put a wide variety of information that should be communicated to the user, but that does not fit in any of the other fields, e.g., meeting where paper was presented, dissertation/thesis notes, related document notes, legibility problems, size of bibliography, etc.
2. Punctuation should be done in accordance with the normal rules of English usage, e.g., separate completely different thoughts or notes with a period rather than a semicolon, just as you would in regular text. However, the semicolon does not function as a subfield delimiter in the Descriptive Note Field and may be used as a normal element of punctuation.
3. Documents containing significant amounts of marginally legible/reproducible material should carry a Note alerting the potential purchaser to this fact.
4. "Parent" documents should always carry a Note referring to any analytic "children" being individually entered.
5. When citing related ED numbers, use proper format, e.g., "For related documents, see ED 150 996-997, ED 150 999, and ED 151 101."
6. The standard two-character postal abbreviations for the states should be used in this field, where appropriate.

DESCRIPTIVE NOTE

EXAMPLES

PAPER PRESENTED AT...

NOTE::Paper presented at the National Conference for Associate Degree Programs in Nursing (3rd, St. Louis, MO, March 4-5, 1966).

DISSERTATION

NOTE::Ph.D. Dissertation, University of Connecticut.

RELATED DOCUMENT(S)

NOTE::For related documents, see TM 002 488-489.

LEGIBILITY PROBLEM

Level 1
(Optional Note)

NOTE::Several figures may not reproduce well due to marginal legibility.

Level 2
(Mandatory Note)

NOTE::Contains many pages of small, broken type.

COPYRIGHTED SEGMENT

NOTE::Pages 121-143 of the original document are copyrighted and have not been reproduced.

SIZE OF BIBLIOGRAPHY

NOTE::Supporting bibliography of 413 references.

AVAILABILITY (OTHER THAN EDRS)

V.B.21

PROFILE

Data Element/Field	- Availability (Other Than EDRS)
Data Entry Tag	- AVAIL ::
Field ID Number (Tape)	- 49
Character Set	- Alphabetic, Numeric, Special
Mandatory/Optional	- RIE (Optional for Level 1/ Level 2 documents—Mandatory for Level 3 documents)
	CIJE (Optional—Covers UMI reprint availability only)
Subfields Permitted	- No
Field Length (Experience)	- 13 (Min.); 449 (Max.); 10 (Av.)
Files	- RIE CIJE (UMI Only)

TYPICAL
ENTRY

AVAIL::University Microfilms, P.O. Box 1764, Ann Arbor, MI
48106 (Order No. 72-22363, MF \$9.00, PC \$18.00).

This field provides information on the availability of documents from sources OTHER THAN EDRS. (For EDRS availability see V.B.7.) While the principal purpose of this information is to provide the user with access to documents not available from EDRS (i.e., Level 3 documents), alternate sources should be cited, when known, even if the document is available from EDRS.

Format of Availability Information

This field should contain all of the following information, when applicable and available.

- Full name of the source of the document. Extraneous phrases such as "Subsidiary of..." should be omitted. Use subunit names when necessary to achieve accurate mail delivery.
- Complete mailing address, including street number or Post Office box number. The standard two-character postal codes for states should be used. Standard abbreviations for "street," "avenue," "post office," etc., should be used. Other abbreviations should generally be avoided. Names of provinces and territories may be included where the address provided by the document does so.

AVAILABILITY

- Catalog, Stock, or Order Number, when applicable. This would include such things as the GPO Stock Number, the University Microfilms Order Number, etc. It would not include the Library of Congress (LC) Card Number, which is not an order number. Standard abbreviations for "number," etc., may be used. The semicolon does not function as a subfield delimiter in this field and may be used as a normal mark of punctuation, as appropriate.
- Price of the document, including volume discounts. Do not use the cent (¢) sign: It is not in the ERIC character set. Translate prices quoted in cents to dollars, e.g., 75¢ should be entered as \$0.75. Prices quoted in non-U.S. currencies should not be abbreviated and may use only characters appearing in the ERIC character set, e.g., 2 £ 5s 20d should be entered as 2 pounds, 5 shillings, 20 pence. Price information changes rapidly and should therefore be entered as succinctly as possible.

Do not use leading phrases such as "Available from...," or "Paper copy available from...." The computer system inserts the phrase "Available from..." in all RIE Availability field entries. "Paper Copy," "Microfiche," "Clothbound," and other document characteristics may, of course, be cited elsewhere in the Availability field (see "Typical Entry").

The Relationship Between Document Level and the Availability Field

- Level 1 (available from EDRS in MF and PC)

Documents announced at Level 1 should always show an alternate availability, if known.

Government Printing Office (GPO) sales documents (which should be announced at Level 1, see V.B.7) should always show the GPO availability, including the Superintendent of Documents Stock Number when it can be determined from the document or accompanying information. (Note: Not all documents printed by GPO are available from GPO.)

- Level 2 (available from EDRS in MF only)

Documents announced at Level 2 should always cite any non-EDRS availability of originals or paper copy reproductions.

- Level 3 (not available from EDRS)

Documents processed at Level 3 MUST cite a source where the user can obtain the document.

Analytics

If a document is an analyzed part of a "Parent" document and is not available separately, a reference to the "Parent" document should be entered, as in the following example:

AVAIL::Not available separately; see TM 002 473.

If the analyzed part is available separately, a reference to the "parent" document should be placed in the Descriptive Note field, e.g.:

NOTE::For related document, see TM 123 456.

Loan Documents

On occasion, all efforts to obtain a reproduction release or to determine an alternate availability for a copyrighted item will fail. Informing the educational community of such an item can only be justified then if a loan source can be specified. Loan-availability should in general be avoided, but when it can be fully justified, it should appear as in the following example:

AVAIL::ERIC/CRESS, Box 3AP, Las Cruces, NM 88003 (on loan).

Supporting Documentation/Audiovisual Materials

Unpublished supporting documentation, not included with the report in hand, or separate audiovisual components associated with the document, should generally only be referred to if some mode of access can be provided the user, and the source cited is willing to assume the administrative burden involved, as in the following examples:

AVAIL::Copies of tests used in the evaluation are available from ERIC/CRESS, Box 3AP, Las Cruces, NM 88003.

AVAIL::The Concordance of the Works of Schiller used as a basis for this study is available in computer printout form from MLA, 62 Fifth Ave., New York, NY 10011 (on loan).

AVAIL::The 351 color slides and audiotape described in the abstract are available from the National Audiovisual Center, Washington, DC 20409 (\$85.00).

Special Arrangements

Many organizations that provide their documents to the ERIC data base are also engaged in selling these documents for income. In many cases, they are willing to give permission to enter their documents at Level 2 as long as ERIC cites the organizations as the source of original printed copies. Organizations that should always be cited as the source for printed copies of their own publications are listed in Figure V-15.

Use of Availability Field in CIJE

The use of the Availability field in CIJE is restricted to an indication of whether the article can be obtained via the University Microfilms (UMI) Journal Article Reprint Service. If the journal from which the article has been extracted appears in the UMI list of journals with which they have a reprinting agreement, then the Clearinghouse should enter "UMI" in this field, as shown below. The computer system automatically expands this to the phrase "Reprint: UMI" in the Master File and in the CIJE printed announcement.

AVAIL::UMI

AVAILABILITY

ADTSEA	American Driver & Traffic Safety Education Association
ACEI	Association for Childhood Education International
ASCD	Association for Supervision & Curriculum Development
—	California State Department of Education, Sacramento
HEEA	Home Economics Education Association
VEIS	Indiana University, Bloomington. Vocational Education Information Services
NAEA	National Art Education Association
NAOP	National Association of Office Personnel
NAESP	National Association of Elementary School Principals
NEA	National Education Association
NSPRA	National School Public Relations Association
NCRVE	Ohio State University, Columbus. National Center for Research in Vocational Education
OECD	Organisation for Economic Cooperation & Development, Paris, France
PDK	Phi Delta Kappa

FIGURE V-15: ORGANIZATIONS THAT SHOULD ALWAYS BE CITED AS THE SOURCE FOR PRINTED COPIES OF THEIR OWN PUBLICATIONS

SUMMARY OF SIGNIFICANT RULES

1. If a document is available from any source other than EDRS, that information should be placed in the Availability field. The information provided should contain all that is necessary to permit the user to obtain the document, i.e., full name of source, complete mailing address (including postal state codes and Zip Code), order number (if any), and price (if available).
2. Level 3 documents (those not available from EDRS) must have an entry in the Availability field. This would include analytics available only via the "Parent" document and documents available only on loan.
3. Punctuation in this field should be done in accordance with the normal rules of English usage. The semicolon does not function as a subfield delimiter in this field.
4. Certain organizations (Figure V-15) have made arrangements so that ERIC must always cite them as the source of availability for original copies.
5. Unpublished supporting documentation, not included with the report in hand, or separate audiovisual components associated with the document, cannot be processed by the ERIC delivery system. The availability of such components should be described in the Availability field.
6. The Availability field in CIJE is reserved for information concerning the availability of reprints. At the present time, only the University Microfilms International (UMI) reprint service is specifically cataloged. If the journal is available from UMI, then "UMI" is cataloged in this field. The CIJE computer system expands this to "Reprint: UMI." Journal publisher/availability information for the less well known and more difficult to obtain journals that are not listed in the *Source Journal Index*, is placed, when applicable, in the CIJE Annotation.
7. When citing an availability contact point within an organization, it is better to use a subunit name or a position title than a personal name. Specific people come and go, but organizations and positions have somewhat more permanence.

AVAILABILITY

EXAMPLES

- GPO AVAIL::Superintendent of Documents, U.S. Government
Printing Office, Washington, DC 20402
(Stock No. 017-080-02092-1, \$6.50).
- NTIS AVAIL::National Technical Information Service,
Springfield, VA 22161 (AD-A102 387/8, MF \$3.50,
HC \$5.50).
- For Federal Government agencies, city, state, and Zip Code are generally adequate, as in the above examples. However, for commercial, state, and private organizations, a street address or P.O. box number is required, as in the examples below.
- UMI
(Dissertations
and Theses) AVAIL::University Microfilms, P.O. Box 1764, Ann Arbor,
MI 48106 (Order No. 72-22363, MF \$9.50,
PC \$18.50).
- UNIVERSITY PRESS AVAIL::Oregon State University Press, P.O. Box 689,
Corvallis, OR 97330 (\$3.50).
- PROFESSIONAL
ASSOCIATION AVAIL::American Institute of Chemical Engineers, 345
East 47 St., New York, NY 10017 (\$15.50 postpaid).
- COMMERCIAL
PUBLISHER AVAIL::UNIPUB, Box 433, Murray Hill Station, New York,
NY 10016 (\$6.50).
- INDIVIDUAL
(RARELY USED) AVAIL::Walter Wiesman, P.O. Box 466, Huntsville, AL 35804
(\$7.50), while supply lasts.
- VOLUME DISCOUNTS AVAIL::Project BOLD, P.O. Box 234, Rockville, MD 20853
(1-9 copies, \$0.75 ea., 10-99, \$0.65 ea., over
99, \$0.50 ea.)
- AVAIL::Project BOLD, P.O. Box 234, Rockville, MD 20853
(1-9 copies, \$0.75 ea., discounts on larger
quantities).
- ANALYTICS AVAIL::Not available separately; see TM 002 473.
- LOANS AVAIL::ERIC Clearinghouse on Rural Education and Small
Schools, Box 3AP, Las Cruces, NM 88003 (on loan).

AVAILABILITY

AUDIOVISUAL
SUPPLEMENTS

AVAIL::The 351 color slides and audiotape described in the abstract can be purchased from the National Audiovisual Center, Washington, DC 20409 (\$85).

REPRINT OF
CIJE JOURNAL
ARTICLE IS
AVAILABLE FROM
UNIVERSITY
MICROFILMS
INTERNATIONAL
(CIJE ONLY)

AVAIL::UMI

NOTE: CIJE Computer System automatically expands this to "Reprint: UMI"

TWO SOURCES

AVAIL::National Clearinghouse for Drug Abuse Information, P.O. Box 1701, Washington, DC 20013; Center for Multicultural Awareness, 2924 Columbia Pike, Arlington, VA 22204.

WRITE FOR PRICE

AVAIL::Indochinese Materials Center, 324 East 11th Street, 9th Floor, Eleven Oak Building, Kansas City, MO 64106 (write for price).

GEOGRAPHIC SOURCE OF DOCUMENT

V.B.22

PROFILE

Date Element/Field	- Geographic Source of Document
Data Entry Tag	- GEO::
Field ID Number (Tape)	- 77
Character Set	- Alphabetic
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- No
Field Length (Experience)	- 15 (Av.)
Files	- RIE (Since January 1979, ED-157 988)

TYPICAL
ENTRY
(RIE Only)

GEO:: U.S.; Indiana

This data element was added to the ERIC file beginning with the January 1979 issue of RIE (ED-157 988). It is not employed with the journal article file (CIJE).

The Geographic Source of the document is intended to indicate the country of origin (usually the place of publication). For the English-speaking countries, which provide the bulk of the input to ERIC, the cataloging is extended to the state or provincial level. In the case of:

- United States, the indication extends to the state or territory level.
- Canada, the indication extends to the provincial level.
- United Kingdom, the indication extends to the four major units comprising that country: England, Scotland, Northern Ireland, and Wales.
- Australia, the indication extends to the major divisions of that country: New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia, and Australian Capital Territory.

When faced with the need to determine the state, province, or territory of a given city, an authoritative gazetteer should be used. In the case of all other countries, further subdivision is not to be used at this time, though the option for expansion later has been retained. (Similarly, subdivision of the United States to the county level is a potential future option.)

GEOGRAPHIC SOURCE OF DOCUMENT

See Figure V-16 for a complete authority list of names to be employed. The country names employed here are intended to be identical to those appearing in the *Identifier Authority List* (C.5.e of Section VIII (Part 2)), with the sole exception that, since the vast majority of documents are domestic, in the interests of brevity, "U.S." is to be used in lieu of "United States." Records not carrying a "U.S." in this field will be, by definition, "foreign" documents.

This field should not be confused with the subject of the document. If a country or geographic area is the subject of the document, it should be entered in the Identifier field for appearance in the Subject Index. Nor should it be confused with the Institution field, which records the full name of the preparing organization, but does not attempt to record its geographic location in searchable format.

As with all cataloging, this data element is to be determined from evidence in the document itself. Research beyond the document is neither necessary nor desirable. All RIE records should carry this data element; however, if it should prove impossible to determine geographic origin (or to make a reasonable "educated" guess), this field should be left blank. If it can be determined that the document is domestic, but the state cannot be determined, then enter solely the country, e.g., "U.S."

Several troublesome situations arise in documents that can make decisions in this field difficult. The following series of questions and answers provides solutions to these problems.

Question: The document is a separate paper presented at a conference. The author is affiliated with an institution in state A; the conference was held in state B. What should the GEO be?

Answer: The location of the conference is strictly incidental. Groups move their conferences around for a wide variety of reasons, more having to do with the accidents of space availability than anything else. More fundamental is the location where the author resided when the paper was prepared. If the GEO choice is between these two, choose the author's location. If all that is known is the conference location then use that.

Question: The document has two authors each of which is affiliated with an institution in a different state. There is no other location information. What state should be used to determine the GEO?

Answer: The first-named author is usually the principal author and should take precedence over second and subsequent authors in determining Geographic Source. If the authors are listed alphabetically, or there are other reasons to question principal authorship, it is always permissible to simply cite "U.S." (for a domestic document), without a further breakdown by state. The same argument holds for publications prepared jointly by two or more organizations each in a different geographic location.

Question: The parent document is a formal Proceedings of a conference. The individual papers contained in the Proceedings have been "analyzed" out as separate accessions. The Proceedings volume itself has a formal publisher (e.g., Academic Press). Should the individual papers be given the same GEO source as the parent document or a GEO source in accordance with the particular author's affiliation?

Answer: It is best to treat the "analytics" exactly as they would be if they came through as separate papers (i.e., not published in the one-volume Proceedings). ERIC processes a lot of such material, and whether ERIC gets it early (in the form of separate papers) or late (as part of a published Proceedings), it is best to have a consistent approach to the cataloging thereof. Therefore, the entire Proceedings volume should be cataloged to the location of its publisher; the analytics should be cataloged in accordance with their respective authors' affiliations.

GEOGRAPHIC SOURCE OF DOCUMENT

SUMMARY OF SIGNIFICANT RULES

1. The Geographic Source field is used to indicate the country of origin of the document. It should not be confused with the subject matter of the document.
2. Country names are cited in the same format in which they appear in the *Identifier Authority List (IAL)*, except for the United States, for which "U.S." is used.
3. For purposes of the GEO field, the four principal English-speaking countries (U.S., United Kingdom, Canada, Australia) are subdivided to the state, province, or territory level.
4. Papers presented at conferences should be identified with the geographic location of the principal author.
5. Analytics should be treated as individual papers, each potentially from a different location, and should not all be identified with the Geographic Source of the parent document.
6. When there are multiple authors, each from different locations, and no other clues as to where the document came from or was published, use the location of the prime (first listed) author.
7. The Geographic Source field is not used in CIJE, and the Geographic Source of CIJE journal articles is not to be cataloged. DO NOT USE the CIJE Identifier field for cataloging a Geographic Source, unless the geographic area in question is ALSO the subject of the journal article.

GEOGRAPHIC SOURCE OF DOCUMENT

EXAMPLES

DOMESTIC, WITH STATE	GEO::U.S.; Indiana
	GEO::U.S.; District of Columbia
	(Incorrect is: U.S.; Washington, D.C.)
DOMESTIC, WITH TERRITORY	GEO::U.S.; Guam
DOMESTIC, STATE UNDETERMINABLE	GEO::U.S. (Incorrect is U. S.)
UNIT OF UNITED KINGDOM	GEO::United Kingdom; Scotland
PROVINCE OF CANADA	GEO::Canada; Alberta
UNIT OF AUSTRALIA	GEO::Australia; Queensland
NON ENGLISH-SPEAKING COUNTRY	GEO::France
COUNTRY UNDETERMINABLE	GEO:: (NOTE: Field to be left blank)

GEOGRAPHIC SOURCE OF DOCUMENT

List 1: U.S. Territories

American Samoa
Guam
Pacific Trust Territory
Puerto Rico
Virgin Islands

List 2: Canadian Provinces and Territories

Alberta
British Columbia
Manitoba
New Brunswick
Newfoundland
Northwest Territories
Nova Scotia
Ontario
Prince Edward Island
Quebec
Saskatchewan
Yukon Territory

List 3: United Kingdom Divisions ("Countries")

England
Northern Ireland
Scotland
Wales

List 4: Australian States and Territories

Australian Capital Territory
New South Wales
Northern Territory
Queensland
South Australia
Tasmania
Victoria
Western Australia

FIGURE V-16: COUNTRY NAMES AUTHORITY LIST

List 5: Preferred Country Names

(* = older name form)

Afghanistan	*Ceylon
Albania	SEE Sri Lanka
Algeria	Chad
Andorra	Chile
Angola	China
Argentina	NOTE Do not confuse with Taiwan
Australia	UF Mainland China; Peoples Republic of China
	NOTE When appropriate, also use state or territory (see List 4, above)
Austria	Ciskei
Bahamas	Colombia
Bahrain	Comoros
Bangladesh	Congo
SF East Pakistan	Costa Rica
Barbados	Cuba
Belau	Cyprus
SF Palau Islands	Czechoslovakia
Belgium	*Dahomey
Belize	SEE Benin
SF British Honduras	Democratic Yemen
Benin	UF Peoples Democratic Republic of Yemen; Yemen (Democratic); Southern Yemen
SF Dahomey	Denmark
Bermuda	Djibouti
Bhutan	Dominica
Bolivia	Dominican Republic
Bophuthatswana	East Germany
Botswana	UF German Democratic Republic
Brazil	*East Pakistan
Britain	SEE Bangladesh
USE United Kingdom	Ecuador
*British Guiana	Egypt
SEE Guyana	El Salvador
*British Honduras	*Ellice Islands
SEE Belize	SEE Tuvalu
Brunei	Equatorial Guinea
Bulgaria	Ethiopia
Burma	Federal Republic of Germany
Burundi	USE West Germany
*Cambodia	Fiji
SEE Kampuchea	Finland
Cameroon	*Formosa
Canada	SEE Taiwan
	France
	NOTE When appropriate, also use province (See List 2, above)
Cape Verde	*French Guiana
Central African Republic	SEE Guiana
	French Polynesia

FIGURE V-16: COUNTRY NAMES AUTHORITY LIST (CONTINUED)

GEOGRAPHIC SOURCE OF DOCUMENT

Gabon	Kuwait
Gambia	Laos
German Democratic Republic	Lebanon
SEE East Germany	Lesotho
German Federal Republic	Liberia
SEE West Germany	Libya
Ghana	Liechtenstein
*Gilbert Islands	Luxembourg
SEE Kiribati	*Madagascar
Great Britain	SEE Malagasy Republic
SEE United Kingdom	Mainland China
Greece	SEE China
Grenada	Malagasy Republic
Guadeloupe	SF Madagascar
Guatemala	Malawi
Guiana	Malaysia
SF French Guiana	Maldives
Guinea	Mali
Guinea Bissau	Malta
Guyana	Martinique
SF British Guiana	Mauritania
Haiti	Mauritius
*Holland	Mexico
SEE Netherlands	Monaco
Honduras	Mongolia
Hong Kong	Morocco
Hungary	Mozambique
Iceland	Namibia
India	UF South West Africa
Indonesia.	Nationalist China
Iran	SEE Iran
Iraq	Nauru
Ireland	Nepal
Israel	Netherlands
Italy	SF Holland
Ivory Coast	Netherlands Antilles
Jamaica	New Caledonia
Japan	New Hebrides
Jordan	New Zealand
Kampuchea	Nicaragua
SF Cambodia; Khmer Republic	Niger
Kenya	Nigeria
*Khmer Republic	North Korea
SEE Kampuchea	SF Korea
Kiribati	*North Vietnam
SF Gilbert Islands	SEE Vietnam
*Korea	Norway
SEE North Korea; South Korea	Oman
	Pakistan
	SF West Pakistan

FIGURE V-16: COUNTRY NAMES AUTHORITY LIST (CONTINUED)

GEOGRAPHIC SOURCE OF DOCUMENT

*Palau Islands	*Tanganyika
SEE Belau	SEE Tanzania
Panama	Tanzania
Papua New Guinea	SF Tanganyika
Paraguay	Thailand
Peoples Democratic Republic of Yemen	Togo
USE Democratic Yemen	Tonga
Peoples Republic of China	Transkei
USE China	Trinidad and Tobago
Peru	Tunisia
Philippines	Turkey
Poland	Turks and Caicos Islands
Portugal	Tuvalu
Qatar	SF Ellice Islands
Reunion	Uganda
*Rhodesia	United Arab Emirates
SEE Zimbabwe	United Kingdom
Rumania	UF Britain
*Russia	UF Great Britain
SEE USSR	NOTE When appropriate, also use "Country" division of U.K. (See List 3, above)
Rwanda	United States
San Marino	NOTE When appropriate, also use state or territory name(s)
Sao Tome e Principe	Upper Volta
Saudi Arabia	Uruguay
Senegal	USSR
Seychelles	SF Russia
Sierra Leone	Vatican City State
Singapore	Venda
Solomon Islands	Venezuela
Somalia	Vietnam
South Africa	SF North Vietnam; South Vietnam
South Korea	West Germany
SF Korea	UF Federal Republic of Germany; German Federal Republic
*South Vietnam	*West Pakistan
SEE Vietnam	SEE Pakistan
South West Africa	Western Sahara
USE Namibia	SF Spanish Sahara
Southern Yemen	Western Samoa
USE Democratic Yemen	Yemen
Spain	NOTE Yemen Arab Republic
*Spanish Sahara	Yemen (Democratic)
SEE Western Sahara	USE Democratic Yemen
Sri Lanka	Yugoslavia
SF Ceylon	Zaire
Sudan	Zambia
Surinam	Zimbabwe
Swaziland	SF Rhodesia
Sweden	
Switzerland	
Syria	
Taiwan	
SF Formosa	
UF Nationalist China	

FIGURE V-16: COUNTRY NAMES AUTHORITY LIST (CONTINUED)

GOVERNMENTAL STATUS OF DOCUMENT

GOVERNMENTAL STATUS OF DOCUMENT

V.B.23

PROFILE

Data Element/Field	- Governmental Status of Document
Data Entry Tag	- GOV::
Field ID Number (Tape)	- 78
Character Set.	- Alphabetic
Mandatory/Optional	- RIE (Optional) CIJE (Not Used)
Subfields Permitted	- No
Field Length (Experience)	- 5 (Min.); 13 (Max.); 6 (Av.)
Files	- RIE (since January 1979, ED-157 988)

TYPICAL
ENTRY
(RIE Only)

GOV::Federal

This data element was added to the ERIC file beginning with the January 1979 issue of RIE (ED-157 988). It is not employed with the journal article file (CIJE).

Governmental Status is intended primarily to indicate whether the document is a publication of a Federal, State, or Local (i.e., City, County) governmental body in the United States and its territories. Legislative, judicial, and executive/regulatory agencies are defined as governmental in this context. Commissions formed under executive authority or legislative mandate are included. Elected Boards of Education are included where they are separate entities, distinguishable from the school system. Schools, colleges, universities (and districts or systems of such institutions) are excluded, even if tax-supported.* The document must be an official production of the governmental body involved. Contractor reports are not to be considered government documents unless they have been issued as a publication of the agency involved, e.g., complete with

* Factors considered in this exclusion are:

- (1) The number of individual schools far exceeds the number of regular governmental agencies in any one jurisdiction. As a result, ERIC contains a large number of documents emanating from schools, school systems, and school districts. If they were all coded as governmental, they would swamp the category and prevent the retrieval of the works of agencies normally thought of as government;
- (2) Without research it is sometimes difficult to determine whether a given school is state or local, public or private, tax-supported or not;
- (3) Schools do not govern or regulate in the same sense as other tax-supported agencies.

GOVERNMENTAL STATUS OF DOCUMENT

seal, agency imprint, and other official indicators.** Non-official papers and speeches of government employees are not to be considered government documents. Documents published by more than one level of government (e.g., state and local working together) are to be classed at the highest level involved.

In the case of domestic documents, the *United States Government Manual* is the authority in determining which quasi-governmental units are to be considered "Federal." The *State Information Book* can be equally useful in checking the status of state organizations.

In the case of non-U.S. governmental documents, their governmental status will be indicated as at that general level (i.e., "Foreign"), without distinguishing further sub-levels. It may be difficult to determine in some cases whether a given "foreign" document is governmental or not. Unless there is a strong reason to believe it is a government document, do not catalog it as such.

If a document is a product of a multi-governmental body, such as the United Nations (or its constituent organizations), Council of Europe, etc., it should be cataloged as "International." International organizations not comprised of governments should be considered non-governmental and should generate no entry in this field.

The permissible terms in this field are: Federal, State, Local, Foreign, International. These are the only terms permitted and all variations are invalid, e.g., Federal Government, County, etc.

Governmental documents of the District of Columbia and the various U.S. territories and possessions (e.g., Puerto Rico, Guam, etc.) should be cataloged as at the "State" level.

**Contractor reports are usually issued by the contractor, not the sponsor, and they often contain specific notices disclaiming any official status. However, contractor reports of exceptional quality or interest may, on occasion, be published (or republished) under the agency imprint, in which case they should then (and only then) be considered government publications.

SUMMARY OF SIGNIFICANT RULES

1. Documents issued by governmental bodies must be coded in this field. For non-governmental documents this field will be left blank.
2. The permissible entries in this field are:
for domestic documents: Federal, State, Local
for non-domestic documents: Foreign, International
3. Schools, colleges, universities, etc., are, for purposes of this field, not regarded as governmental, even if tax-supported.
4. Contractor reports are not to be considered the official publications of government agencies, unless reissued under the official imprint of the government agency for which they were done.

GOVERNMENTAL STATUS OF DOCUMENT

EXAMPLES

Domestic (i.e., U.S.)
Federal Government GOV::Federal

Domestic (i.e., U.S.)
State Government GOV::State

Domestic (i.e., U.S.)
Local Government
(i.e., County, City,
Township, etc.) GOV::Local

Foreign Government
(i.e., non-U.S.)
(Any Level) GOV::Foreign

International
(Multi-governmental
bodies, e.g.,
United Nations) GOV::International

Non-Government GOV::

(NOTE: Field to be left blank)

IDENTIFIERS

IDENTIFIERS

V.B.24

PROFILE

Data Element/Field	- Identifiers
Data Entry Tag	- IDEN::
Field ID Number (Tape)	- 36
Character Set	- Alphabetic, Numeric, Special (Parentheses Only)
Mandatory/Optional	- Optional
Subfields Permitted	- Yes
Field Length (Experience)	- 3 (Min.); 544 (Max.); 35 (Av.)
Files	- RIE and CIJE

TYPICAL ENTRY

IDEN::King Kong; *Project Adventure

This field provides for additional subject indexing terms that may be required to fully index a document, but which are not appropriate for inclusion in the ERIC *Thesaurus* (or which have not yet been added to it). Such indexing terms include, for example: project names (e.g., Project Head Start), legislation (e.g., Economic Opportunity Act 1964), titles (e.g., Doctor Zhivago), and new subject terms under consideration for Descriptor status once their scope, "staying power" in the Identifier "proving ground," and definition have been established. Rules and guidelines for the selection and creation of Identifiers are detailed in Section VIII (Part 2) of this manual.

While Identifiers are only semi-controlled indexing terms, without the same cross-reference structure as Descriptors, approved Identifiers are displayed in the *Identifier Authority List* (IAL). When entering Identifiers, the IAL (and its supplements) should always be consulted in order to verify the proper format. Desirable indexing terms not found in either the *Thesaurus* or the IAL may be established and used in the Identifier field, provided the guidelines in Section VIII (Part 2) are followed.

Indexing Depth

The use of Identifiers for indexing documents is optional. There is no requirement that an Identifier be assigned to every document. In point of fact, the average number of Identifiers per document is less than one. Use one or more Identifiers only when required to adequately index the document.

IDENTIFIERS

Major Identifiers

There is no minimum requirement for Identifiers; however, no more than two (2) Identifiers may be asterisked (*) as major indexing terms in any one record. Only one (1) major Identifier may be used if the record has six (6) major Descriptors. As with major Descriptors, only major Identifiers appear in the subject indexes of RIE and CIJE. The purpose and function of major Identifiers is the same as for major Descriptors (see V.B.12).

SUMMARY OF SIGNIFICANT RULES

1. Individual Identifiers may not exceed 50 characters in length, including blank spaces.
2. Identifiers may not contain any punctuation other than left and right parentheses (to enclose a qualifier).
3. Multiple Identifiers must be separated by semicolons followed by a space.
4. There is no minimum or maximum number of Identifiers that may be entered for a given record.
5. Identifiers are written with initial capital letters. Except when used as the initial word or in a literary/artistic title (e.g., "Graduate (The)"), articles, prepositions, and conjunctions are not capitalized in an Identifier. Acronyms (all upper case) may also be used as part of an Identifier; however, because of their potential for being homographs, the use of acronyms alone as Identifiers is discouraged.
6. No more than two (2) Identifiers may be asterisked (*) as major subject terms for any one record. (Since the overall limit for major terms is seven (7)), two Identifiers can be made major only when there are no more than five (5) major Descriptors.
7. Identifiers should be entered exactly as they appear in the *Identifier Authority List* (IAL). If new, they should be structured in accordance with the guidelines of Section VIII (Part 2) of this manual.
8. There is no requirement for any particular order or sequence of the Identifiers being entered. Similarly, major Identifiers do not have to precede minor Identifiers, or vice versa.
9. Institutions should not be cited in the Identifier field unless they are actually the subject of the document. Situations where the same organization name appears in both the Institution field and the Identifier field are generally the result of faulty cataloging.
10. Most U.S. and Canadian organization names used as Identifiers should be followed by a two-character postal code showing the state/province location of the organization. For guidance on this rule see Item C.15.a of Section VIII (Part 2).
11. All ERIC Clearinghouse Publications should be assigned the Publication Type 071. It is not necessary to use the Identifier "Information Analysis Products" unless IAPs are the subject of the document.

IDENTIFIERS

EXAMPLES

SINGLE IDENTIFIER

IDEN::Project Head Start

MULTIPLE IDENTIFIERS (MAJOR/MINOR MIX)

IDEN::*Elementary Secondary Education Act Title III; Alabama

PERSONAL NAME IDENTIFIER

IDEN::Gandhi (Mahatma)

DOMESTIC INSTITUTIONAL IDENTIFIER (WITH STATE DESIGNATION ADDED)

IDEN::Riverside Unified School District CA

USES OF PARENTHESES

IDEN::Apache (Tribe)

IDEN::Arabic (Cairene)

IDEN::Erikson (Erik)

IDEN::Ministry of Education (USSR)

IDEN::Monopoly (Game)

IDEN::Paragraph Reading Test (Olson)

IDENTIFIER CONTAINING NUMERIC CHARACTERS

IDEN::Proposition 13 (California 1978)

IDENTIFIER CONTAINING ACRONYM

IDEN::Project TALENT

IDEN::DOBIS System

LEGISLATION

IDEN::Social Services Act 1974

IDEN::Brown v Board of Education

ABBREVIATED IDENTIFIER (REDUCED TO 48 CHARACTERS)

IDEN::Maryland Commission Study Educ Needs Handicapped

RDU PROGRAM DOCUMENTS

IDEN::Research and Development Utilization Program

TARGET AUDIENCE

V.B.24A

TARGET AUDIENCE

PROFILE

Data Element/Field	-	Target Audience
Data Entry Tag	-	AUD::
Field ID Number (Tape)	-	51
Character Set	-	Alphabetic
Mandatory/Optional	-	Optional
Subfields Permitted	-	Yes
Field Length (Experience)	-	18.27 characters
Files	-	RIE (since January 1984) CIJE (since September 1984)

TYPICAL ENTRY

AUD::Administrators

HISTORICAL NOTE

This data element, in its fully defined form, was added to the ERIC database beginning with the January 1984 issue of Resources in Education (RIE) and the September 1984 issue of Current Index to Journals in Education (CIJE). During the last quarter of 1983 (November-December issues of RIE), as part of a pilot project investigating a specialized document-based "Practice File," the terms "Practitioners" and "Students" were added to this field for all regular RIE input documents whose Target Audience was explicitly stated as Practitioners or Students. These data were distributed to all the major online vendors as part of their regular monthly update tapes.

In addition, this same "Practice File" pilot project retrospectively reviewed RIE data (for the period May 1975 through October 1983) and CIJE data (for the period May 1975 through August 1984), and added these same two target audience terms to all appropriate accessions identified in this nearly 9-year period. This retrospectively "tagged" data have been offered as an update to all the online vendors. At this writing, only DIALOG has agreed to update their search files with the 1975-83 RIE data.

Searchers should therefore note that in any given RIE record during the period May 1975-1983, the Target Audience field may contain the terms "Practitioners" or "Students," but will not contain any other audience terms. Beginning with RIE (Jan. 1984) and CIJE (Sept. 1984), the Target Audience field may contain any of the various terms described in this section. Use of this data element in a computer search will automatically exclude all materials entering the ERIC database prior to May 1975 and will severely limit the output during the period 1975-1983.

TARGET AUDIENCE

GUIDELINES

The Target Audience data element is intended to identify the segment of the educational community (or related public) that the document has been written for and that it is directed at. In creating a document, an author or preparing institution frequently (but not always) has in mind an intended audience that they hope will pick up the document and use it. It is the purpose of this data element to identify this audience and to record it in such a way that searchers may, if they desire, limit their search output to material directed at specific audiences.

For this purpose, various "audiences" have been identified. These audiences represent those segments of the educational community (and related public) that can in a practical way be distinguished from one another. Other segments exist, but have not been selected for a variety of reasons: (1) they are too small and specialized; (2) they overlap too much with one another and would therefore create decision problems; (3) they are not sufficiently well-defined or do not have an agreed-upon identity; (4) documents are not written specifically for such groups in any quantities, etc. The defined audiences are:

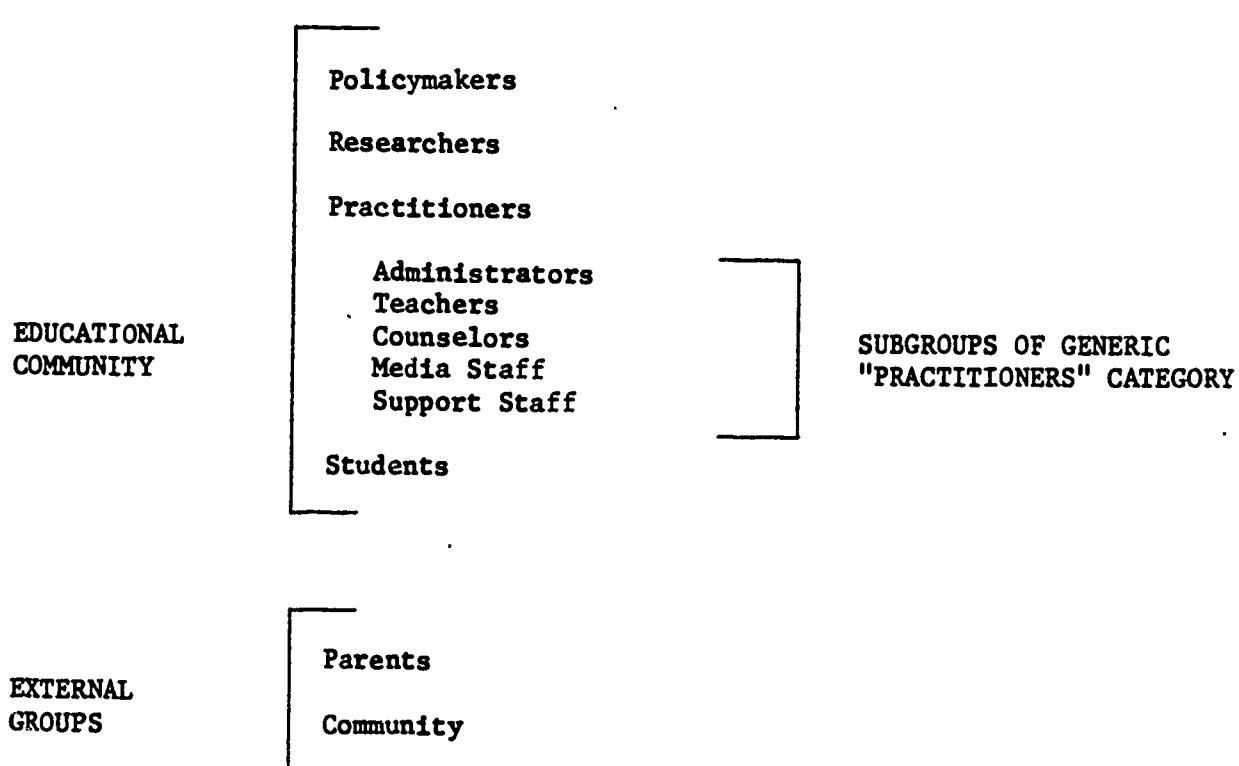


FIGURE V-18: TARGET AUDIENCES (AUTHORITY LIST)

TARGET AUDIENCE

These "audiences" are more fully defined in Figure V-18 by the provision of examples of the types of jobs/staff that would fall in each category.

The key guideline to note in applying this data element is that "Target Audience" implies that someone has selected a target to "shoot" at. That "someone" is the document preparer (author or institution). The cataloger should not speculate on who might be interested in the document, or who ought to read it, or who the cataloger would like to see read it, or who could get something out of it. Applying this data element in a subjective way would not permit the necessary consistent application by the many ERIC catalogers involved.

It is essential, therefore, that the Target Audience decision be based objectively on what the document says and what can be determined unambiguously by examination of the document and its characteristics, i.e., the decision should be based on hard evidence. This is not a mandatory data element and should not be catalogued unless it can be catalogued easily and without mental reservation about the decision.

Figure V-18 displays the various audience types and provides extensive guidance to the cataloger by defining each audience in terms of the types of staff/jobs that would make up each category. Further, Figure V-18 provides examples of the types of documents that would tend to be directed at each audience. Please notice the use of the word "tend." The decision as to Target Audience is essentially independent of all other data elements, including Publication Type. For example, a bibliography cannot be said to be targeted for any particular audience simply by virtue of being a bibliography. To be assigned a Target Audience, a bibliography must state for whom or for what objective it was prepared.

The major Target Audience, "Practitioners," as the largest single audience met with, has been subdivided into five specific types of practitioner, for greater utility to the user/searcher. The cataloger may use the generic term "Practitioners" to indicate the audience or may use any of the sub-categories. If three or more practitioner sub-categories are indicated, the cataloger should simply use the generic term "Practitioners" by itself.

In order to facilitate the limitation of search output by the large "Practitioners" category, whenever a cataloger employs one of the practitioner sub-categories, the ERIC computer system will automatically add the generic term "Practitioners" to the field. In other words, it is not necessary for the cataloger to write the term "Practitioners" if one of the practitioner sub-categories is being used.

COMMON PROBLEMS AND HOW TO HANDLE THEM

- When to Use the Generic Term "Practitioners"?

If a clearly practitioner-oriented document fails to say explicitly (or via evidence) which particular practitioners are being addressed, then it is generally better to simply use the generic term "Practitioners" than it is to "force" a finer classification, e.g., via process of elimination.

TARGET AUDIENCE

MAJOR GROUPS		EDUCATIONAL COMMUNITY							EXTERNAL GROUPS		
SUB-GROUPS		POLICY-MAKERS*	RESEARCHERS*	PRACTITIONERS*				STUDENTS	PARENTS	COMMUNITY	
TYPES OF STAFF IN EACH AUDIENCE	Boards of Education Education Commissions/ Committees Legislators Regulators School Boards Trustees	Analysts Evaluators Experimenters Research Managers Researchers Statisticians Surveyors Test Construction Specialists	Administrators Business Office Staff Coll/Univ. Pres. Commissioners Consultants/Advisors Coordinators County Staff Curriculum Spec. Deans District Staff Financial Staff LEA Staff Legal Staff Personnel Staff Planners Principals SEA Staff Superintendents Supervisors	Camp Staff Coaches Day Care Staff Inservice Teachers Instructional Personnel Part-time Teachers Preservice Teachers Professors Remedial Teachers Spec. Ed. Staff Student Teachers Substitute Teachers Teacher Aides Teacher Assoc./ Unions Teacher Educators Teachers Teaching Interns Tutors Voc. Ed. Staff	Career Assistance Staff College Placement Staff Counselors Guidance Staff Psychologists (Functioning as Advisors, e.g. on Social Adjustment, etc) Student Advisors	Auditorium Staff Diffusion/ Dissemination Specialists Information System/ Center Staff Librarians Media Center Staff	Athletics (non teachers) Buildings & Grounds Food Services, e.g. Cooks, Dietitians, Nutritionists Health Services, e.g. Physicians, Nurses, Therapists Psychologists (Functioning as Mental Health Monitor, Psychiatrists, etc) Secretaries Transportation Staff Volunteers	Learners Pupils Scholars Students	Foster Parents Parents PTA Groups Single Parents	Church Leaders Clergy Community Groups Employers Industrial/Commercial Organizations Local Businesspeople Neighborhood Groups	
TYPES OF DOCUMENTS COMMONLY (BUT NOT ALWAYS) DIRECTED AT EACH AUDIENCE	Assessments of Educational Progress Feasibility Studies National Commission Reports	Conference Presentations (Researchers Talking to Researchers) Research Reports Research Summaries Statistical Compilations	Administrator Guides Conference Presentations (Administrators Talking to Administrators) Contracts Fact Sheets Forms Guides for Evaluating School Programs Handbooks Laws Policies Regulations	Annotated Bibs. Conference Presentations (Teachers to Teachers) Curriculum Mat. Guides for Selecting Instructional Materials Instructional Mat. Learning Activity Packages Lesson Plans Promising Practices Resource Mat. Tests Units of Study	Career Guidance Materials College Related Information Directories Forms Reference Works Tools	A-V Materials Bulletin Board Materials Dictionaries Directories Forms Facts Sheets Graphs Illustrations Library Manuals Micrographic Materials Mixed Media Pictorials Posters Reference Works Resource Materials	Building Plans Facilities Materials Health-Related Materials Maintenance Schedules Nutrition/Meal-Related Materials	Background Readings Games Puzzles Resource Materials Study Suggestions Textbooks Worksheets	Assessments of Educational Progress Fund Raising Materials Guides for the Public Public Relations Materials		

*The word "Education" or "Educational" should be understood to be in front of each of these terms, e.g. "Educational Administrators".

Figure V-19: Target Audience Groups (Defined by Example)

- Practitioners - Must They be School-Based?

1) The Practice File project has never defined practitioners as solely those that are formally school-based; 2) Many educational practitioners perform their functions in non-school-based situations, e.g. Indian reservations; 3) There is great difficulty in defining precisely what a "school" is; 4) A school-based practitioner may well be justly targeted by a document describing a function (e.g. teaching, counseling, media work, etc.) going on outside a formal "school" setting. For these reasons, the entire practitioner group in this scheme can be referred to as education-based, but not necessarily school-based.

- Primary Targets and Secondary Targets

Primary target groups should, of course, be cataloged. Secondary targets should be reviewed critically and used sparingly. A research report that is basically intended for researchers, but that concludes its technical discussion by detailing the extensive implications of the research findings for working counselors, is probably legitimately cataloged as for "Researchers; Counselors". However, a teacher manual that contains ideas for a teacher to use in the classroom should probably be restricted to "Teachers", even though some of the material consists of actual problems to be solved by students. The reasoning here is that the document itself is intended for teacher use and would reside on the teacher's desk no matter what the teacher might choose to extract from it for student use.

- What Kind of Document is Targeted for "Researchers"?

The following factors can be considered "evidence" that a document is researcher-oriented: 1) amount of material devoted to directions for further research; 2) amount of experimental and statistical data presented (that could only be checked by other researchers); 3) degree of technicality of material presented (that could only be comprehended by other researchers); 4) forum in which presented, e.g. annual conference of professional society (researchers talking to researchers).

- Overlap between Audiences

It is easy to imagine some overlap between the audiences, e.g. the administrator who is allowed to set policy, the teacher who becomes temporarily a student, etc. For the purposes of this scheme, however, it is necessary to assume that the groups are relatively "pure", i.e. Policymakers set policy, Administrators administer school systems, etc. The classifier should not blur the essential distinctions between these groups, even though real life situations may well do so.

INACTIVE/OBSOLETE
DATA ELEMENTS/FIELDS

PROJECT NUMBER

V.B.25

PROFILE

Data Element/Field	- Project Number
Data Entry Tag	- BN::(Derived from <u>Bureau Number</u>)
Field ID Number (Tape)	- 48
Character Set	- Alphabetic, Numeric, Special (hyphens and slashes)
Mandatory/Optional	- Optional (Use discontinued in 1982)
Subfields Permitted	- Yes
Field Length (Experience)	- 4 (Min.); 64 (Max.); 9 (Av.)
Files	- RIE only (Inactive; discontinued in 1982)

TYPICAL
ENTRY
(RIE Only)

BN::BR-5-8047
 BN::V361123L; 498AH80003

NOTE: This data element not currently in use.

A Project Number is the alphanumeric code assigned by the Sponsoring Agency to the project under which the document in hand was produced. Project Numbers should not be confused with Contract/Grant Numbers.

Historical Note: This data element was in use through June 1982. During this time only U.S. Office of Education and U.S. Department of Education Project Numbers were cataloged. Early U.S. Office of Education contractor reports utilized a Project Number beginning with the prefix "BR" (standing for Bureau of Research), e.g., BR-5-8047. This format was later discontinued. No unified Project Number system exists for all Department of Education components and many components do not use Project Numbers at all. For this reason, and because Project Numbers appear on documents so infrequently, this data element has been made inactive.

PROGRAM AREA CODE

V.B.26

PROFILE

Data Element/Field	- Program Area Code
Data Entry Tag	- PA::
Field ID Number (Tape)	- 20
Character Set	- Numeric
Mandatory/Optional	- Optional (Use discontinued in 1979)
Subfields Permitted	- No
Field Length	- 2 (Fixed Length)
Files	- RIE only (Inactive; discontinued in 1979)

TYPICAL
ENTRY
(RIE Only)

PA::32

NOTE: This data element not currently in use.

The two-digit numeric Program Area code was established to identify the legislative authority under which the project producing the document was funded. Unfortunately, relatively few documents made a practice of citing their authorizing legislation. In recent years, the code appeared infrequently in RIE records, and, in 1979, it was dropped entirely and labeled inactive.

The authorized codes and congressional legislative authorities in effect when the code was in use are listed in Figure V-17. When in use, the Program Area Code was entered as shown in the typical entry above.

PROGRAM AREA CODE

NOTE: THIS DATA ELEMENT NOT CURRENTLY IN USE

<u>CODE</u>	<u>PROGRAM AREA</u>
08	Adult and Vocational Education, PL 88-210
16	Captioned Films for the Deaf, PL 85-905
24	Cooperative Research, PL 89-10, Title IV
32	Disadvantaged Students Program, PL 89-10, Title I
40	Handicapped Children and Youth, PL 88-164
48	Language Development, PL 85-864, Title VI
52	Library Research and Development, PL 89-320, Title III, Part B
56	New Educational Media, PL 85-864, Title VII, Part A
64	New Educational Media, PL 85-864, Title VII, Part B
72	Research in Foreign Countries, PL 83-480
80	State Educational Agencies Experiment Activities, PL 89-10, Title V, Section 505
88	Supplementary Centers and Services, PL 89-10, Title III
95	Other Office of Education and National Institute of Education Programs (Projects for which the legislative authority cannot be determined are included here).

FIGURE V-17: PROGRAM AREAS AND CODES

**C. DOCUMENT PREPARATION
(DURING CATALOGING FOR RIE)**

C. Document Preparation (During Cataloging for RIE)

The technical report or "fugitive" literature collected by ERIC is produced by a wide variety of printing techniques in many formats, and under variable degrees of quality control. The producer of the document may be an individual working with minimal technical support or may be a large organization with access to both editors and graphic artists. Since the documents processed by ERIC go on to be microfilmed and to be reproduced in microfiche and paper copy for sale to users, it is essential that the ERIC document processor prepare the document in such a way that a copy of it is a saleable product.

During the selection process, many conditions are pointed out (see Section III.E) that can affect the decision to accession or not. However, it is usually during the cataloging process that any remedial actions are actually taken.

The kinds of problems requiring document preparation may be divided into three categories:

- Physical problems with the pages of the document;
- Legibility problems or reproducibility problems with the type, inks, papers, figures, etc.;
- Technical problems having to do with the availability of information external to the document, copyrighted segments of documents, and the affixing of the ERIC labels and accession numbers.

In addressing these problems, the ERIC document processors should keep in mind that the documents will in all likelihood be filmed and provided to paying users as copies of exactly what leaves their hands. If problem situations cannot be fixed, the user should be warned in the cataloging that they exist. While pagination (of all Level 1 and 2 documents) is a centralized ERIC Facility function, the paginator assumes that the document has been made ready by the Clearinghouses for page numbering. If problems with a document prevent pagination from proceeding, the document will be removed from RIE input and will be returned to the submitting Clearinghouse for any necessary action.

1. Physical Problems

a. Cover and Title Page Essentially Identical

If the Cover and Title page are essentially identical, there is no point in filming (and making the user pay for) a completely redundant page. However, if one does not completely subsume the other, then both should be left intact and filmed. Information (e.g., report numbers, series information, disclaimers, dates, etc.) must never be lost through this process. If in doubt, retain both pages.

b. Missing Pages or Sections

Documents should be checked page-by-page to determine that all pages are present. This can be done in various ways:

- by accounting for all page numbers
- by checking against the Table of Contents
- by checking continuity from one page to the next, etc.

It is not unusual for appendices and other material at the back of the document to be missing.

Missing pages must usually be replaced, either by obtaining a replacement copy of the document or by inserting the missing material. If, however, it is determined that the missing material may safely be left out without any adverse effect, or that the missing material must be left out (e.g., author's request, copyright, etc.), then the document processor should:

- insert into the document, where the gap occurs, a notice in the following format:

"Page(s) _____ was (were) missing
(removed) from this document prior to its
being submitted to the ERIC Document Reproduction
Service."

- mark the disclaimer label on the cover, appropriately, indicating document modification.
- insert into the Descriptive Note field an appropriate statement explaining the fact that material is missing and the reasons therefor.

c. Out of Sequence Pages or Sections

The check for missing pages will usually reveal any out of sequence pages. Such pages should simply be re-sequenced in the correct order.

d. Duplicate Pages

The check for missing pages will usually reveal any duplicate pages. Such pages should simply be removed.

e. Blank Pages

Blank pages, occurring sporadically in documents where the pages are routinely printed front and back, are not filmed (even if numbered in the original document). On each such blank page,

the Clearinghouse should add the following legend in letters approximately one-quarter inch ($\frac{1}{4}$ "") high:

BLANK PAGE
DO NOT FILM

In order to avoid bleedthrough, do not use felt markers for adding this legend. A rubber stamp or a sticker with the letters in a color other than black is recommended. Since this is a recurring operation, either of these techniques is to be preferred over hand lettering or marking, e.g., a large "X" on the page. This notice is for the Facility paginator and the EDRS operator of the microfilming equipment. The legend should, therefore, be prominent and visible. Small legends at the bottom of a page are not recommended.

NOTE: This instruction does not apply to documents that through their entire length are printed on one side of the page only. The page number stamping done by the Facility will suffice in such patterned cases to communicate filming instructions to EDRS.

f. Extraneous/Superfluous Pages

There are occasionally pages in a document that bear some small amount of printed material (e.g., a logo, heading, tab, etc.), but that are essentially blank. A judgment must be made as to whether the fragmentary information on the page is useful for the user, whether it may safely be ignored, or whether it can be simply moved to the next substantive page. Many of these pages are fly pages or act as separators for sections or parts of the document. If the material immediately following the separator also contains the heading or title, then the separator may be deleted without loss. If the document is printed front and back and the extraneous page has text on the other side, the processor may indicate that it is not to be filmed by marking a large "X" across the entire page.

Note that disclaimer statements by government agencies or other organizations are not to be considered superfluous.

Extraneous pages of this type may be fairly numerous in curriculum guides and other such material and their removal may be consequential in lowering the price of the item.

g. Loose Pages

Documents receive considerable handling at the ERIC Facility and at EDRS. If documents are not bound but consist of loose pages, there is danger that they will get out of sequence somewhere along the way. All documents consisting of loose pages (or having some loose pages) should, therefore, be secured in some way, with a binder, metal fastener, rubber bands, etc., to prevent their disarray.

h. Wrong-Reading Pages

Pages with material reading at variance with the normal reading orientation of the document are called "wrong-reading." Usually such pages have material reading parallel to the long dimension. It is ERIC's policy that all pages will be filmed in a right-reading orientation for the microfiche. When a wrong-reading page is turned 90° to accomplish this, it usually then occupies two frames on the microfiche. In some cases, however, this can be avoided because the actual material on the wrong-reading page is not wider than 8½". In such cases the wrong-reading page can be remounted by the document processor in the correct right-reading orientation to become a normal 8½" x 11" page. This is worth doing because each page handled in this way results in one less microfiche frame expended and, possibly, a lower overall price.

i. Oversize Pages and Foldouts

Oversize pages are defined as any page over 8½" in width or 11" in height. Section V.B.5 on Pagination, details how such large pages are converted into multiple microfiche frames. Occasionally, however, the filming problems caused by oversize pages can be avoided altogether if the document processor can convert them beforehand into normal 8½" x 11" pages. The possible techniques involved are: "reducing" office copiers; trimming and remounting; cutting and remounting; and re-typing. Care must be taken in all cases not to lose text. Legal size documents, such as many originating in Europe, may often easily be reduced from 14" to 11" in height by trimming the top and bottom margins.

Document preparation of this type can involve an extensive amount of work and is usually only practical for individual problem pages and not for entire documents.

j. Undersize Pages

Undersize pages present no real filming problem but occasionally, if small enough, may present an opportunity for compression. If two small pages can be made to fit in the standard 8½" x 11" page space, some documents can be halved in size.

k. Attachments, Supporting Documentation, Advertising, Nonprint Components

If a document consists of a main part plus some supplementary parts, it must be made completely clear whether the supplementary materials are to be considered part of the document for filming purposes or whether they are simply being sent along for informational purposes. If nonprint components are transmitted, their subsequent disposition should be indicated.

2. Legibility/Reproducibility Problems

Factors that cause legibility/reproducibility problems are discussed in detail in the *ERIC Document Reproducibility Guidelines*, which should be consulted to determine the impact of any given factor. If re-typing is not practical because the legibility problems are extensive, the user should be alerted to the problem via the Note field.

a. Type Size

In general, type size of 6 point or below causes serious reproduction problems. When only a page or two are involved, re-typing should be considered.

b. Broken/Faint/Smudged Type

Broken type is the consistent dropping of portions of the characters, e.g., the left side, the descenders, the top, etc. Faint type usually results from too little ink, either via the typewriter ribbon or the printing press. Smudged type has had the original characters spread or dispersed around themselves, thereby confusing their nature.

Unlike the small type problem, which is inherent with the document, the broken/faint/smudged type problem may sometimes be solved by acquiring an improved copy (even perhaps the original) from the author or source.

If an improved copy cannot be obtained, remedial actions are generally limited to either re-typing of the affected text or hand re-touching of the faulty characters. Sometimes broken characters can be made readable (and reproducible) by hand lettering of the defective lines. When this approach is taken, a fine point artist lettering pen with an India ink cartridge is recommended. As with re-typing, re-touching is only feasible when the amount of material is modest in quantity.

c. Colored Pages or Inks

The combinations of colored pages and inks that film poorly are shown in the *ERIC Document Reproducibility Guidelines*. When these are found in a document, the principal remedial action that can be taken is to simply photocopy the colored pages and replace them with the resultant black and white copies. Re-typing is rarely possible because when a document utilizes colored papers or inks it generally does so extensively.

Colored pages are sometimes used in curriculum materials to distinguish materials for the teacher's use from materials for the student's use. Since the colors are lost in the filming process, the distinction between the sections can only be maintained by use of a code or other wording added by the document processor to the pages.

Colors are sometimes used as a coding technique in charts, tables, and bar graphs to convey meaning. Since the colors are lost in the filming process, the information contained in the original figure can only be retained if some symbol is used to substitute for the color. The document processor should consider different kinds of cross-hatching, arrows, patterns of special characters, and footnotes to achieve this end. Samples 144 and 145 in the *ERIC Document Reproducibility Guidelines* provide an example of this technique. Clearinghouses should not hesitate to use these techniques in order to preserve the information contained in the original text.

d. Photographs

Photographs do not film or copy well unless very stark and simple in their content. There is nothing that the document processor can do to improve them; however, they are better left in the document for the information they can convey. If a document depends heavily on photographs, it is advisable to state this fact in the Descriptive Note field, e.g., "Contains 25 early photographs of American Indians, which will not reproduce well."

e. Figures, Tables, Illustrations

Figures, tables, and illustrations are frequent sources of reproduction difficulties and should be scrutinized by document processors with this in mind. Statistical tables and figures are often reduced excessively. Drawings and illustrations are often faint. Re-typing or re-touching are usually the only possible remedial actions.

f. Handwriting/Script in Documents

Handwritten text appears in documents in various ways. Sometimes it is in the form of author corrections or additions inserted for emphasis during presentation. Sometimes it is integral to the subject matter, e.g., factors affecting student handwriting. Script rarely reproduces well. If the script is in the form of corrections or additions to a typed or printed text, the document processor should consider re-typing to incorporate the script. If the script is integral to the document, but faint, the document processor should consider tracing over the lines to make them darker.

g. Miscellaneous

Pencil or pen markings that may have been inserted by an author but that are not significant should be erased or eliminated with correction fluid without affecting the text. Clearinghouse abstractors and indexers should be cautioned against contributing to such marks during the performance of their function.

Folded or rumpled pages should be flattened out as much as possible, or re-copied.

Felt tip markers should never be used for darkening text or title page information as the ink may bleed through and obliterate the text on the other side.

3. Technical Problems

a. Information Known But Not on Document

During the course of acquiring a document or obtaining a reproduction release, the Clearinghouse will often obtain information of use in the cataloging process that goes beyond what appears in the document, e.g., author's name and affiliation, institution name, date of issuance, geographic source, contract number, availability data, etc.

When practical, this information should be added to the Title Page. If there is no real Title Page, or the text begins on the first page and there is no room for additions, the Clearinghouse should consider the creation of a Title Page to house the additional information. When adding information to a Title Page, enclose the information in square brackets to indicate that it was supplied from sources external to the document.

If the new information is not added in some way to the document, but is placed in the cataloging, then it is essential that supporting documentation for the information accompany the submission, so that the editors can distinguish errors from valid additions.

b. Information Known But at Variance with That on Document

If information is discovered that corrects information on the document, then the document should actually be corrected. However, if the new information is obtained in the form of an official "errata" then the errata page should simply be inserted directly after the Title Page. Obvious typographical errors in title, personal names, institution names, place names, etc., should simply be corrected on the document. Re-sequencing of author names should only be done upon receipt of a written request from the first author.

c. Inconsistent Information on Document

It sometimes happens that information in one part of the document contradicts information in another part. If the correct version is not obvious, it may be necessary to contact the author or source. Information found in this way should be made correct on the document. If the contradiction cannot be resolved, the Title Page form takes precedence.

d. Material Removed from Document

If a document being considered for the ERIC system contains materials that will not reproduce clearly because of either color or poor print quality, an attempt should be made to obtain a better copy. Usually the author or producer of the document would prefer to furnish a reproducible copy rather than have an incomplete version available from ERIC.

In many instances the illegible parts are tables or charts which are referred to in the text. Omission of such segments may adversely affect the value of the document, thereby frustrating the user. In general, material should not be removed, despite poor legibility.

In cases where a better copy of a document cannot be obtained and remedial actions are not possible, consideration should be given to omitting the document, unless it provides a unique and valuable contribution to the literature, and the illegible material is considered to be minor.

e. Affixing ERIC Labels and Accession Numbers

(1) Clearinghouse Accession Numbers

Clearinghouse Accession Numbers are to be entered on the lower left hand corner of the cover (or first page to be filmed) of the document (See Figure IV-15). Not only does this placement balance the ED number and give the document a neater appearance, but the standardized format is needed during processing in order that documents may be easily and quickly located.

Accession Numbers are to either be stamped or legibly printed. Legibility in the Clearinghouse Number is of importance throughout the entire processing cycle:

- Accession Numbers on the documents are checked against the logsheets.
- Documents are filed at the Facility by Accession Number.
- Numbers are checked against the resumes.
- Documents are arranged in Clearinghouse Number order prior to the attachment of the Single Frame Resumes.

Illegible numbers may cause confusion at any or all steps in the process, thus adding extra work where it might be avoided by legible numbers.

(2) ED Accession Numbers

Guidelines in EPM Section IV: "Handling and Shipping," state that the ED Number will be affixed to the document in the upper left hand corner of the cover (or first page to be filmed). The upper left hand corner should, therefore, not be used to affix the disclaimer and/or reproduction release labels. When the document is shipped to the Facility, that space must be left open for the ED number to be stamped on. (See Figure IV-15.)

(3) NIE Disclaimer Labels and Reproduction Release Labels

The NIE Disclaimer Labels and Reproduction Release Labels (if appropriate), are to be affixed to the cover (or the first sheet to be filmed) of the document. These labels may be placed anywhere there is vacant space on this page, except for the upper and lower left hand corners, which are reserved for the ED and Clearinghouse Accession Numbers, respectively.

They should be placed in such a manner and location that they do not cover, even slightly, the text, title, author's name, etc. They may be trimmed down in order to fit; it is not recommended, however, that the labels be cut into parts. They especially should not be cut into parts and distributed perpendicularly to the text. If there is no space for the labels (for instance, when the document's first page is the first page to be

filmed and is packed with text, or when the margins are narrow at both the top and bottom), the simplest and neatest thing to do is to type a title page and place the labels there. Contrary to "oral tradition," there is no EPM requirement that either or both of these labels be placed in the upper center of the document. Other than the "off limits" space in the left hand corner, labels may be placed anywhere, in any empty space on the title page as long as they can fit without overlapping the text.

Labels, however, should never hang over the document's edge. Labels are to be placed entirely on the document—overhangs must be trimmed. Overhanging labels not only look carelessly applied, but, more importantly, can be missed in the filming process. Overhanging labels can catch on surfaces of other documents and the document itself can be damaged. ERIC documents are handled numerous times at the Facility and at EDRS; protruding labels can get bent over, wrinkled, or torn off during processing.

Remember that when that critical first page of the document is being prepared, it will reflect on the Clearinghouse (to insiders) and on ERIC (to outsiders) what pride is taken in the work. All labels should be straight, balanced, attractive, and in the proper position.

PB-277 951

GUIDELINES FOR DESCRIPTIVE CATALOGING OF REPORTS.
A REVISION OF COSATI STANDARD FOR DESCRIPTIVE CATALOGING
OF GOVERNMENT SCIENTIFIC AND TECHNICAL REPORTS.

SECTION 2: CORPORATE AUTHOR (p. 11-26).

PB-277 951

GUIDELINES FOR DESCRIPTIVE CATALOGING OF REPORTS.
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OF GOVERNMENT SCIENTIFIC AND TECHNICAL REPORTS.

SECTION 2: CORPORATE AUTHOR (p. 11-26).

2. Corporate Author

- 2.1. Definition. Corporate author is the name usually given to the institutional or corporate body preparing the report, which is experimentally (or technically), editorially and/or contractually responsible for the report. Organizations most likely to be involved in issuing scientific and technical reports include: academies, arsenals, associations, business corporations, centers, colleges, companies, councils, establishments, firms, foundations, government agencies, groups, hospitals, institutes, institutions, laboratories, museums, cbserveatories, proving grounds, schools, societies, stations, universities, and their foreign equivalents.
- 2.1.a. The corporate author is sometimes referred to as the source or originating agency; the government or other agency which is responsible financially for the report and controls its distribution is sometimes referred to as the controlling or monitoring agency.
- 2.2. The purpose of establishing a corporate author heading is to give the name of the corporate body in a fashion which is easy to identify and possible to retrieve from published indexes and other searching tools.
- 2.3. Selection of Elements of Corporate Author Headings. Methods of selecting the form of corporate author heading are outlined below and explained in greater detail in later sections.
- 2.3.a. Only two organizational elements may be chosen from those displayed on the title page and cover of the report.
- 2.3.b. When two elements are chosen, they are the largest and the smallest elements; the city and state name of the smallest element follows the largest element of the corporate author heading.
- Largest Element, Place Name. Smallest Element.
General Electric Co., Huntsville, AL. Computer Dept.
- 2.3.c. This selection of elements may be varied only if:
1. A smaller element includes a proper name (see 2.5.a.)
 2. A smaller element is the name of an independent company or a major government bureau or service (see 2.5.b.)
 3. The report series number assigned by the originator indicates a different level of editorial responsibility (see 2.5.c.)

- 2.4. General Rules. Catalog from the report in hand, using only those organizational elements that appear on the report. The simplest corporate author heading consists of one organizational name and a geographic name. The number of organizational elements displayed on the report may vary from one to five or six, and some indication of geographic location is usually given. When more than two organizational elements are displayed in the imprint, the corporate author heading includes only two; these two should be the largest and the smallest, and are written:

Largest, Place Name. Smallest.

General Electric Co., Cincinnati, OH. Nuclear Materials
and Propulsion Operation.

- 2.4.a. U.S. is omitted before government headings.
- 2.4.b. City or state names which repeat part of the name of the main element are omitted. If the subelement includes a geographic name, the geographic name is repeated as part of the subelement.

Massachusetts Inst. of Tech., Cambridge.
Rochester Univ., NY.

Burroughs Corp., Radnor, PA. Radnor Div.

Pratt and Whitney Aircraft, Middletown, CT. Connecticut
Advanced Nuclear Engineering Lab.

- 2.4.c. State names are not abbreviated within a heading, except when used as part of the place name.

*State Univ. of New York at Albany.

but Rochester Univ., NY.

- 2.4.d. Names of state and local government agencies should start with the name of the state or local government; words like "state", "city", "county", are included or omitted in accordance with local practice.

Virginia Dept. of Corrections, Richmond.
New York State Dept. of Education, Albany.

Baltimore City Dept. of Planning, MD.

Baltimore County Dept. of Health, MD.

- 2.4.e. The name "University of... (city or state)" is always written beginning with the city or state name, regardless of legal and financial relationships; punctuation is not inserted in the inverted form. The names "University of... (geographic region)" and "State University of..." are written without reversal.

*ERIC uses "State Univ. of New York, Albany."

Pennsylvania Univ., Philadelphia.
University of Southern California, Los Angeles.
*State Univ. of New York at Stony Brook.
*Alabama Univ. in Huntsville.
*Wisconsin Univ.-Madison.

- 2.4.f. Departments of universities are always written in the form "Dept. of...", regardless of the way they appear on the report.

University of Southern California, Los Angeles. Dept.
of Electrical Engineering.

not

University of Southern California, Los Angeles. Electrical
Engineering Dept.

- 2.4.g. Departmental committees are written following the name of the department.

Office of Naval Research, Washington, DC. Committee on the
Basic Properties of Liquid Metals.

- 2.4.h. Joint committees are written directly under their own names.

Joint Atomic Weapon Technical Information Group.

- 2.4.i. Abbreviations are not used as the first word of a heading, but are spelled out. An exception is made only when the abbreviation is a legally or officially established element of the corporate title.

Air Force Avionics Lab....not AF Avionics Lab....
Saint Anthony Falls Hydraulic Lab....not St. Anthony....
United States Rubber Co....not U.S. Rubber Co....
RCA Corp., New York, NY.

- 2.4.j. If an organization customarily uses an abbreviated form of its official, legal, or chartered name, the abbreviated form is preferred.

Stanford Univ., CA.

not

Leland Stanford Junior Univ., CA.

*ERIC uses: State Univ. of New York, Stony Brook.
Alabama Univ., Huntsville.
Wisconsin Univ., Madison.

- 2.4.k. If a corporate author changes its name, both old and new forms of the name are retained, with cross references made between them. (See 2.7.a.) A specific report is cataloged under whichever name appears on the publication.
- 2.4.1. If a report is authored jointly by two or more components of the same organization, the heading should be no more specific than the smallest organizational level common to all components. If any component includes a proper name or reflects a report number series, then all components are taken as joint corporate authors.

Joint authors: General Electric Co., Cincinnati, OH.
Flight Propulsion Div.
Advanced Engine Technology Dept.

and General Electric Co., Cincinnati, OH.
Flight Propulsion Div.
Large Jet Engine Dept.

use: General Electric Co., Cincinnati, OH.
Flight Propulsion Div.

Report number UCRL-8945

Joint authors: California Univ., Berkeley. Dept. of Physics.

and California Univ., Berkeley. Lawrence
Radiation Lab.

use both.

- 2.4.m. International unions which have no permanent headquarters may be written with no place name.
- 2.4.n. If any of the following terms is written out on the document, it should be abbreviated within the corporate heading (as long as it is not the first word in the heading).

Abteilung	Abt.
Air Force Base	AFB
Air Force Station	AFS
Aktiebolaget	A.B.
Aktiengesellschaft	A.G.
Brothers	Bros.
College	Coll.
Company	Co.
Corporation	Corp.
Departamento	Dept.
Departement	Dept.
Departementet	Dept.
Department	Dept.

Divisao	Div.
Division	Div.
Divisione	Div.
Gesellschaft mit beschraenkter Haftung	G.m.b.H.
Incorporated	Inc.
Institut	Inst.
Institute	Inst.
Institute of Technology	Inst. of Tech.
Institutet	Inst.
Instituto	Inst.
Institutt	Inst.
Institutul	Inst
Instituut	Inst.
Instytut	Inst.
istituto	Inst.
Laboratoire	Lab.
Laboratoires	Labs.
Laboratories	Labs.
Laboratoriet	Lab.
Laboratorio	Lab.
Laboratorium	Lab.
Laboratory	Lab.
Limited	Ltd.
Manufacturer	Mfr.
Manufacturing	Mfg.
Universidad	Univ.
Universidade	Univ.
Universita	Univ.
Universitaet	Univ.
Universitas	Univ.
Universitatea	Univ.
Universite	Univ.
Universiteit	Univ.
Universitet	Univ.
Universitetet	Univ.
Universiti	Univ.
University	Univ.
Univerzita	Univ.
Univerzitet	Univ.
Uniwersytet	Univ.

NOTE: This rule does not restrict the use of abbreviations
that occur on the document.

- 2.4.o. The following abbreviations are used for U.S. geographic names when used as part of the geographic location; the new abbreviations are taken from the National ZIP Code Directory.

[State]	[New]	[Old]
Alabama	AL	Ala.
Alaska	AK	none
American Samoa	AS	none
Arizona	AZ	Ariz.
Arkansas	AR	Ark.
California	CA	Calif.
Canal Zone	CZ	none
Colorado	CO	Colo.
Connecticut	CT	Conn.
Delaware	DE	Del.
District of Columbia	DC	D.C.
Florida	FL	Fla.
Georgia	GA	Ga.
Guam	GU	none
Hawaii	HI	none
Idaho	ID	none
Illinois	IL	III.
Indiana	IN	Ind.
Iowa	IA	none
Kansas	KS	Kans.
Kentucky	KY	Ky.
Louisiana	LA	La.
Maine	ME	none
Maryland	MD	Md.
Massachusetts	MA	Mass.
Michigan	MI	Mich.
Minnesota	MN	Minn.
Mississippi	MS	Miss.
Missouri	MO	Mo.
Montana	MT	Mont.
Nebraska	NE	Nebr.
Nevada	NV	Nev.
New Hampshire	NH	N.H.
New Jersey	NJ	N.J.
New Mexico	NM	N. Mex.
New York	NY	N.Y.
North Carolina	NC	N.C.
North Dakota	ND	N. Dak.
Ohio	OH	none
Oklahoma	OK	Okla.
Oregon	OR	Oreg.
Pennsylvania	PA	Pa.
Puerto Rico	PR	none
Rhode Island	RI	R.I.
South Carolina	SC	S.C.
South Dakota	SD	S. Dak.

[State]	[New]	[Old]
Tennessee	TN	Tenn.
Texas	TX	Tex.
Trust Territories	TT	none
Utah	UT	none
Vermont	VT	Vt.
Virgin Islands	VI	none
Virginia	VA	Va.
Washington	WA	Wash.
West Virginia	WV	W. Va.
Wisconsin	WI	Wis.
Wyoming	WY	Wyo.

Editor's Note: Previous editions of the COSATI standard cited older and longer forms of state name abbreviations and these were followed by ERIC for many years and are reflected in the ERIC Source Directory. Beginning with the July 1982 issue of RIE, ERIC shifted to the now standard two-character postal abbreviations, and all organization names established after that date use the new abbreviations. It is hoped that future editorial projects will make possible the conversion of all the old abbreviations to the new forms.

- 2.4.p. The Directory is also used to establish the correct form of the place name in cases of doubt. If a branch post office has a ZIP code different from that of the post office, use the name of the branch post office.

Argonne National Lab., Lemont, IL. See Argonne National Lab., IL.
(since Argonne is a substation of Lemont but has its own ZIP code)

- 2.4.q. For military installations, use the post office as given in the Directory. For Fleet and Army Post Offices, follow the military form: include the abbreviation "APO" or "FPO" and the ZIP code, but omit the state name.

Wright-Patterson AFB, OH.
Andrews AFB, MD. Use Andrews AFB, Washington, DC
Army Medical Detachment (51st), APO New York 09108.
Medical Detachment (Thoracic) (240th), APO San Francisco 96318.
Fleet Air Mediterranean/Anti-Submarine Warfare Force (Sixth Fleet), FPO New York 09521.

2.5 An exception is made to the rule for selecting elements, largest-smallest, from several elements displayed, when one of the subordinate elements: a) includes a proper name; b) is an independent name; or c) is designated as the responsible organizational level by a report series number.

2.5.a. Proper names. A smaller organizational element that begins with a proper name is selected as the secondary or subelement, ignoring other smaller elements in the imprint. Proper names include: a noun not defined in the dictionary, the name of a person, part of the name of a company repeated in the name of the component, an acronymic form of name, and geographic names. The words American and National are considered to be proper names.

Johns Hopkins Univ., Baltimore, MD. Carlyle Barton Lab.
Anaconda American Brass Co., Waterbury, CT. Anaconda
Metal Hose Div.

Bureau of Mines, Morgantown, WV. Appalachian Experiment
Station.

NOTE: If there are two subordinate elements, one showing a proper name and one showing a report series, choose the subordinate element represented by the report series.

2.5.a.1. Personal names. If the first element of a heading begins with initials of a personal name, the entry is started with the surname, followed by initials enclosed in parentheses.

Anderson (M.D.) Hospital and Tumor Inst., Houston, TX.
Goodrich (B.F.) Co., Akron, OH.

2.5.a.2. If the first element of a heading begins with a personal forename, and is the name of a company or other commercial/industrial organization (including Associates, Engineers, etc.), the heading starts with the surname, followed by forename and initials enclosed in parentheses.

Little (Arthur D.), Inc., Cambridge, MA.

2.5.a.3. If the first element of a heading begins with a personal forename, and is the name of a university, laboratory, institute, center, hospital, foundation or other apparently non-commercial organization, the heading is written directly as given.

Harry Diamond Labs., Washington, DC.

- 2.5.a.4. If the subordinate element of a heading begins with a personal name, that name is written without rearrangement.

California Inst. of Tech., Pasadena. W.M. Keck Lab.
of Engineering Materials.

- 2.5.a.5. A subordinate element that begins with the words U.S., National, or the state name in a state organization, is considered to be independent.

U.S. Army Engineer District, Huntington
Corps of Engineers
Huntington, WV.

Use: Army Engineer District, Huntington, WV.

Hawaii Institute of Geophysics
University of Hawaii
Honolulu, Hawaii

Use: Hawaii Inst. of Geophysics, Honolulu.

National Magnet Laboratory
Massachusetts Institute of Technology
Cambridge, Mass.

Use: National Magnet Lab., Cambridge, MA.

- 2.5.b. Independent names. A subordinate element of a company is recognizable as an independent corporate entity by words such as Inc., Co., Ltd., Corp., etc., or by the fact that descriptive phrases such as "a division of...", "a subsidiary of...", are not included within the name itself.

Imprint reads: Atomics International
A Division of North American Aviation, Inc.
P. O. Box 309 Canoga Park, California.

Use: Atomics International, Canoga Park, CA.

Not: North American Aviation, Inc., Canoga
Park, CA. Atomics International.

Such an independent element is written as a single-element heading with place name, omitting the name of the largest element. The heading is followed by the name of a still smaller organizational element where such is included in the imprint.

2.5.b.1. Major bureaus and services of the U.S. Government are listed as one-element headings, omitting the larger organizational element; any such heading may be followed by the name of the smallest element.

Public Health Service, Rockville, MD.

Bureau of Reclamation, Denver, CO.

Coast and Geodetic Survey, Washington, DC.

Agricultural Research Service, Beltsville, MD.

2.5.b.2. Parenthetical identification is added when necessary.

Division of Raw Materials (AEC), Washington, DC.

Bureau of Medicine and Surgery (Navy), Washington, DC.

Deputy Chief of Staff, Personnel (Air Force),
Washington, DC.

Adjutant General's Office (Army), Washington, DC.

2.5.b.3. Named observatories are written as independent headings.

Yerkes Observatory, Williams Bay, WI.

not: Chicago Univ., Williams Bay, WI. Yerkes Observatory.

2.5.b.4. If a college or school of a university has a proper name, it is written as an independent heading.

Trinity Coll., Cambridge (England).

not: Cambridge Univ. (England). Trinity Coll.

Mary Washington Coll., Fredericksburg, VA.

not: Virginia Univ., Fredericksburg. Mary Washington Coll.

Wharton School of Finance and Commerce, Philadelphia, PA.

not: Pennsylvania Univ., Philadelphia. Wharton School
of Finance and Commerce.

2.5.b.5. If an independent element of a government agency is a laboratory, center, or institute, no further subdivision is used.

Armed Forces Inst. of Pathology, Washington, DC.

not: Armed Forces Inst. of Pathology, Washington, DC.
Geographic Pathology Div.

unless: the subordinate element is also represented by a report series.

Naval Air Propulsion Test Center, Trenton, NJ.

Aeronautical Turbine Dept.

(Report series NAPTC-ATD-133)

2.5.b.6. If an acronymic report series indicates the editorial responsibility of a subordinate element of a government agency, that element is considered to be independent and no further elements are included.

Report number: ASD-TR-61-327

Imprint: Flight Accessories Laboratory
Aeronautical Systems Division
Air Force Systems Command
United States Air Force
Wright-Patterson Air Force Base, Ohio.

Use: Aeronautical Systems Div.,
Wright-Patterson AFB, OH.

Include the subordinate element if it is also represented by a report series.

Army Natick Labs., MA. Clothing and Organic Materials Div. (Report Series TR-66-2-CM and C&OM-15)

Note: For report series in non-government agency reports, see 2.5.c.1.

2.5.c. Report Series. Many reports include a report series number which indicates the level of organizational and editorial responsibility. Most of these report series include an acronym which can be readily related to one or more of the organizational elements listed in the imprint.

2.5.c.1. For smaller organizational element choose that element indicated by the report series.

Report number: SID-65-933

Imprint: Space Sciences Laboratory
Space and Information Systems Division
North American Aviation, Inc., Downey, California

Use: North American Aviation, Inc., Downey,
CA. Space and Information Systems Div.

Note: For report series in government agency reports, see 2.5.b.6.

2.5.c.2. If the report series indicates a larger-smaller order of responsibility, follow that order in the corporate author heading, selecting the two elements indicated by the report series and ignoring any other elements.

*2.6. Foreign corporate author headings. The name of a foreign corporate body is written directly, followed by the name of the city, followed by the name of the country written in parentheses.

Royal Aircraft Establishment, Farnborough (England).

2.6.a. Foreign names are written in the native language, or transliterated from the native language whenever the native form of the name is known; but if the foreign institution chooses to publish all its reports in English under an English form of corporate name, or if the official publications of an institution include the corporate name given in English, use the English form with cross references from the foreign form.

Societa Richerche Impianti Nucleari, Milan (Italy).

Technical Univ. of Denmark, Lyngby.

Danmarks Tekniske Hoejskole, Lyngby. See Technical Univ. of Denmark, Lyngby.

Norwegian Defence Research Establishment, Kjeller.

Forsvarets Forskningsinstitutt, Kjeller (Norway).

See Norwegian Defence Research Establishment, Kjeller.

2.6.b. Names of foreign cities are not abbreviated; names of foreign countries are not abbreviated except for USSR. The name of the country is not repeated if included in the heading.

Australian National Univ., Canberra.

Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro.

2.6.c. Foreign place names used as filing points are written in the form of common usage as indicated by the Board on Geographic Names; when the name forms an integral part of the heading, retain the native form.

Turin Univ. (Italy).

but: Politecnico di Milano (Italy).

2.6.d. Foreign universities are written in the same way as American universities. If the name of the university begins with the foreign equivalent of "University of...(place name)", write the place name first and abbreviate the foreign form of "university" to "Univ."

*Appendix 2 of PB-277 951 (not reprinted in the EPM) treats the Canadian provinces and the four major divisions of the United Kingdom as "Countries."

Universidad de Barcelona. See Barcelona Univ. (Spain).
Universidade do Brasil, Rio de Janeiro. See Brazil Univ.,
Rio de Janeiro.
Universita degli Studi, Milan. See Milan Univ. (Italy).
Universitaet Wien. See Vienna Univ. (Austria).
Universite de Paris. See Paris Univ. (France).
Universiteit van Amsterdam. See Amsterdam Univ.
(Netherlands).
Universitetet i Oslo. See Oslo Univ. (Norway).

- * 2.6.e. If a foreign university commonly prefers the form "University of (place name)" to the official version of its name, use the place name version.

Kiel Univ. (Germany, F.R.)
Christian Albrechts Univ., Kiel (Germany, F.R.)
See Kiel Univ. (Germany, F.R.)

- * 2.6.f. Technische Universitaet is written using the common form of place name and omitting the formal portion of the name.

Technische Univ., Brunswick (Germany, F.R.)
Technische Univ. Carolo Wilhelmina zu Braunschweig (Germany,
F.R.). See Technische Univ., Brunswick (Germany, F.R.)

- 2.6.g. All other forms of name are retained as written.

Pontificia Univ. Catolica do Rio de Janeiro (Brazil).

- 2.6.h. Foreign scientific academies are written as the name of the academy, followed by place and country. (Name of country is omitted when included in the name of the academy).

Akademiya Nauk SSSR, Moscow.

not: Akademiya Nauk SSSR, Moscow (USSR).

- 2.6.i. Institutes, sections, etc. of foreign academies are written following the name of the academy, place, and country. If an institute name from a Russian or a satellite country is followed by a personal name, omit the personal name.

Akademiya Nauk Kazakhskoi SSR, Leningrad.
Fiziko-Tekhnicheskii Inst. (Omit "im. A. F. Ioffe".)

- 2.6.j. All other foreign institutes, not connected with their national academies, are written directly.

Institut Inzhenerov Zheleznodorozhnogo Transporta,
Dnepropetrovsk (USSR).

*ERIC uses the form "West Germany" in lieu of the form "Germany, F.R."

- 2.7. Rules for making cross-references to and from corporate author headings.
Cross references indicate a relationship between two corporate author headings. A see reference indicates an unacceptable form of heading; the existence of the reference is recorded on the preferred form of heading by an x (refer from) reference.

Navy Dept., Washington, DC. See Department of the Navy,
Washington, DC.

Department of the Navy, Washington, DC.
x Navy Dept., Washington, DC.

- 2.7.a. A change in the name of a corporate author is covered by an sa (see also) reference which refers the user to the later names. The xx (refer also from) reference indicates the previous names.

Clinton Labs., Oak Ridge, TN.

sa Clinton National Lab., Oak Ridge, TN. (later name)
sa Oak Ridge National Lab., TN. (later name)

Clinton National Lab., Oak Ridge, TN.

sa Oak Ridge National Lab., TN. (later name)
xx Clinton Labs., Oak Ridge, TN. (former name)

Oak Ridge National Lab., TN.

xx Clinton Labs., Oak Ridge, TN. (former name)
xx Clinton National Lab., Oak Ridge, TN. (former name)

- 2.7.b. If the smaller part of the organizational name might appear on some other report without full identification, make a cross reference from the name of the smaller part.

Committee on Fire Research (NRC), Washington, DC. See
National Research Council, Washington, DC.
Committee on Fire Research.

Institut fuer Theoretische Physik, Graz (Austria). See
Graz Univ. (Austria). Inst. fuer Theoretische Physik.

Laboratoire de Chimie Physique, Paris (France). See Paris
Univ. (France). Lab. de Chimie Physique.

- 2.7.c. Make a see reference from alternate forms of the name.

Danmarks Tekniske Højskole, Lyngby. See Technical Univ.
of Denmark, Lyngby.

- 2.7.d. Make cross references to show organizational elements that have been listed in the heading.

Office of Naval Research, Washington, DC. Naval Research Lab. See Naval Research Lab., Washington, DC.

California Univ., Berkeley. Dept. of Physics. Cosmic Ray Group. See California Univ., Berkeley. Cosmic Ray Group.

Air Force Systems Command, Wright-Patterson AFB, OH. AF Aero Propulsion Lab. See Air Force Aero Propulsion Lab., Wright-Patterson AFB, OH.

Research and Technology Div., Wright-Patterson AFB, OH. AF Aero Propulsion Lab. See Air Force Aero Propulsion Lab., Wright-Patterson AFB, OH.

- 2.7.e. Make cross references from acronyms and abbreviations.

DOE See Department of Energy, Washington, DC.

- 2.7.f. When establishing a heading for a foreign corporate body, a cross reference from the name of the foreign country may be included.

Instituto Venezolano de Investigaciones Cientificas, Caracas.
x Venezuela. Instituto Venezolano de Investigaciones Cientificas, Caracas.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 6: ABSTRACTING/ANNOTATING

September 1980

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION VI: ABSTRACTING/ANNOTATING

ABSTRACTING/ANNOTATING

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ABSTRACTING/ANNOTATING

SUMMARY OF SIGNIFICANT RULES

1. An abstract must be written (or extracted) for all documents announced in RIE. An annotation must be written for all articles announced in CIJE that do not have expository titles, and is highly recommended for all other articles.
2. All abstracts and annotations must be in the English language.
3. Abstracts should be of the *informative* type whenever possible. Certain documents, because of their organization (e.g., conference proceedings, textbooks, etc.) or topic (e.g., compilations of laws, bibliographies, etc.), are not amenable to this approach and require *indicative* abstracts. Annotations, because of their restricted length, are usually indicative. Mixed informative/indicative abstracts may also be appropriate, but care must be taken to make it clear at all times whether the viewpoint being expressed is that of the author or the abstractor.
4. Abstracts should be restricted in length to one paragraph of approximately 200 words. Annotations should be restricted in length to 50 words.
5. The conventional and accepted rules for good writing and good abstracting practice and style should be followed, e.g.:
 - a. Brevity and clarity are essential.
 - b. Abstracts (but not annotations) should have the same relative emphases as the document.
 - c. Abbreviations should not be used.
 - d. Acronyms should be accompanied by the spelled-out version.
 - e. Repetition of the title, or other information already contained in the descriptive cataloging, should be avoided.
 - f. The abstractor should remain objective and avoid introducing personal prejudices.
 - g. Evaluative language, comparisons of companies or commercial products, and derogatory comments concerning any person or organization should not be included unless they are clearly identified as the author's.
 - h. The distinction between author statements and abstractor statements should always be clear.
 - i. Abstracts should be written in complete sentences. Annotations may employ telegraphic sentences.

VI. ABSTRACTING/ANNOTATING

A. Definition and Function of an Abstract

An abstract is an abbreviated representation of a document, without added interpretation or criticism. An abstractor must take a larger work, find its essence, and represent it concisely and accurately, without injecting the abstractor's personal biases. The minimum requirement of every abstract is a statement of the subject and scope of the document, giving sufficient information to enable users to decide if the original document is suited for their needs.

Dictionaries tend to equate an abstract with a summary, synopsis, digest, condensation, or precis. One authority defines it as a "...terse presentation in (as far as possible) the author's own language, of all the points made, in the same order as in the original piece of primary documentary information."

The ERIC system uses two distinct types of abstracts, i.e., informative and indicative, and, on occasion, a combination of the two. These types of abstracts are described below.

1. Informative Abstract

An informative abstract is a condensed version of the essential ideas of a document. It contains a statement, from the viewpoint of the author, of the thesis, development or proof, and conclusions. In short, it states what the document actually says. The abstractor should not editorialize, include personal opinions, or otherwise intrude, either explicitly or implicitly. The major and minor points presented by the author should be presented in the abstract with the same emphases as in the document, so that the author's thoughts may be accurately represented. In order to accomplish this, the abstractor must read as much of the document as is necessary to understand its subject content. Illustrative examples are provided below.

The following abstract is of a program report. It was written as an informative abstract in order to give the reader the maximum amount of information about the program. This is a readable, useful statement providing the essence of the report.

The 1979 Summer Youth Employment Program, sponsored by the Davis-Monthan Air Force Base in Arizona, included 596 youngsters, of whom 377 belonged to the Neighborhood Youth Corps, 130 were economically disadvantaged, and 48 were American Indian students employed by the base. A wide range of government, industrial,

...Continued...

and educational institutions supported this vocational development program by providing funds, practicum counselors, vocational counselors, school buses, and other services. The work experience proved highly successful, due to the encouragement of the work-coordinators and counselors and the use of such techniques as resource speakers, peer tutoring, a refresher course in typing, and drug education instruction. Special education students were included in this program, which was evaluated by means of questionnaires for supervisors. (AA)

FIGURE VI-1: INFORMATIVE ABSTRACT OF A PROGRAM REPORT

The following abstract of a paper is faithful to the author's point of view. To write "The author says..." at the beginning of the abstract would add nothing to it (except to make a reader think that any abstract without those words in it was not quite faithful to the author) and to insert those three words in the middle of the abstract would surely confuse a reader.

Negative preconceptions about the disadvantaged often hinder the effectiveness of teachers and administrators in schools in culturally depressed areas. Most disadvantaged children are not special discipline problems, nor are they hostile or unresponsive. They and their parents have high, even unrealistic, educational aspirations. Teachers should encourage in the children the self-discipline which leads to academic success, which, in turn, would break the self-fulfilling prophecies of failure. (AA)

FIGURE VI-2: INFORMATIVE ABSTRACT WRITTEN FROM THE AUTHOR'S VIEWPOINT

The following abstract is an example of a coherent, unified paragraph showing clearly the order of the argument. Transitional words help the reader to follow the line of development.

The teacher and the school system serve as the key mediators in the acculturation of students from deviant subcultures. However, the teacher's commitment to the ethic of work and competition, to a future-oriented value system, and to the concept of a father-dominated nuclear family structure often tends to alienate teacher from student. As a result, many Indian and East Harlem children, whose culture is different from that of the teacher, may never acquire the tools for full acculturation. Alienation between student and teacher may be further reinforced by the child's concept of the teacher as a success in a hostile culture and by the teacher's materialistic motivation for choosing a profession. Moreover, the educator's opportunity for a personal, individual evaluation of students is often limited by administrative prescriptions. Several important steps in teacher education can assure a more successful cultural bridge between student and school personnel. The staff should understand and accept the presence of alien subcultures in their school and initiate measures for parent cooperation and student participation in programs for developing skills and raising the aspiration level. Teachers should also exhibit flexibility in recognizing and rewarding evidences of nonverbal achievement. (AA)

FIGURE VI-3: INFORMATIVE ABSTRACT MAINTAINING THE ORDER OF THE ARGUMENT OF THE ORIGINAL DOCUMENT

2. Indicative Abstract

An *indicative* abstract is a description of or guide to the content and format of the document, written from the viewpoint of an informed but impartial and objective reader. The indicative abstract reports broadly what is discussed or included in the document, in what manner the information is presented, and, if necessary, to whom the document is addressed. The abstractor may obtain sufficient information to write an indicative abstract by examining the Table of Contents, Foreword, Introduction, Summary, etc., or by scanning the text. Illustrative examples are provided below.

The following abstract of a bibliography gives the reader all the information needed about the content of the document. Such words as "*emphasis on*" and "*the major portion*" suggest the document's proportions and therefore its potential usefulness.

Eight hundred and nine books and articles published between 1885 and 1967 are listed in this bibliography for students of applied German linguistics at the graduate and undergraduate levels and teachers of German in high schools and colleges. Though emphasis is on applied linguistics, some publications on linguistic theory are included. The major portion of the bibliography is devoted to works on morphology and syntax, and there are sections on general language and linguistics, phonetics and phonemics, prosodic features and juncture, linguistics and the teaching of foreign languages, and language changes in German since 1945, especially in the increased use of English words. The entries are cross-referenced and some are annotated for clarification of content. An author index and a list of the abbreviations used for titles of scholarly journals are also provided. (AA)

FIGURE VI-4: INDICATIVE ABSTRACT OF A BIBLIOGRAPHY

The following abstract of a report on a summer institute illustrates how an indicative abstract may be used to reflect the same *emphasis* as the original. Although there are enumerations and lists, every sentence does not begin or end with "...is included," and there is no monotony of sentence structure.

The narrative portion of this report describes a specially designed summer institute for state foreign language supervisors held at Indiana University. It summarizes activities undertaken in the six principal areas of the curriculum: (1) statistics; (2) experimental design and research; (3) linguistics; (4) supervision and curriculum development; (5) psychology and professional resources; and (6) instruction in French, German, and Spanish. The report also

...Continued...

presents the results of the evaluation made by participants at the conclusion of the institute. The information contained in the appendixes, amounting to more than one-half of the report, includes the forms used in conducting the institute, a directory of participants and staff, the schedule of special events, the institute calendar, lecture outlines, student and faculty evaluation questionnaires, bibliographies, and a list of the materials available to participants. (AA)

FIGURE VI-5: INDICATIVE ABSTRACT MAINTAINING RELATIVE EMPHASSES OF ORIGINAL DOCUMENT

The following abstract is of an article that contained *tables and interpretation of statistical data*. It is a readable abstract, which not only emphasizes the main idea, but also gives supporting information.

A Modern Language Association (MLA) statistical survey presents tables showing the number of students studying French, Spanish, German, or Latin in domestic secondary schools during each school year from 1958-59 to 1964-65, the percentage studying each language in relation to the total high school population, and the percentage studying Latin in relation to the total foreign language enrollment. The data reveal a continuous decline in the study of Latin in high schools, as compared with the study of the other three languages, and point to, among other things, a lack of understanding among students, educators, and parents of the cultural value of classical studies for the English-speaking student. The kind of nationwide "public relations" program that the MLA launched in 1952 (to promote modern foreign language study) is recommended on behalf of classical language study. (AA)

FIGURE VI-6: INDICATIVE ABSTRACT OF DOCUMENT INVOLVING STATISTICAL TABLES AND THEIR INTERPRETATION

3. Informative-Indicative Abstract

Ideally, an abstract should be either *informative* or *indicative*. Switching back and forth within one abstract, from a direct transmission of the author's ideas, to the style of an *indicative abstract* and the point of view of the abstractor, can confuse the user. It is not always possible to achieve this ideal, however. The structure of certain documents may require a mix of the two styles. ANSI Standard Z39.14 states this principle as follows:

"A combined informative-indicative abstract must often be prepared when limitations on the length of the abstract and the style of the document make it necessary to confine informative statements to the primary elements of the document and to relegate other aspects to indicative statements."

This same standard recommends making abstracts "...as informative as is permitted by the type and style of the document." If a mixed informative-indicative abstract is written, the reader must never be unsure as to whether the viewpoint of the words being read is that of the author or that of the abstractor.

The abstract which follows describes the basis for the document, and its specific recommendations, without getting excessively involved in the validity study made or technical criticism of that study. This is an appropriate mix of substantive and indicative information:

A national survey of occupational opportunities, wage rates, establishment practices, education plans, and supplementary benefits in bituminous coal mining revealed that production and related workers averaged \$6.94 an hour in January 1976, up 110% since the 1967 survey. Over the same period the hourly earnings index rose by 84% for private nonagricultural workers. Reflecting primarily a series of single pay rates, each covering a large group of job classifications, the coal industry continued to have one of the lowest relative dispersion factors of worker earnings among industries studied. Of the 128,390 workers covered by the 1976 survey (virtually all men), underground-mine workers constituted three-fourths of the work force and surface workers constituted one-fourth. About eight in every ten workers were employed in mines having collective bargaining agreements with the United Mine Workers, whose recent agreement covers March 1978 through March 1981. Following the narrative summary, the major portion of the

...Continued...

report consists of data tables on: (1) underground mines; and (2) surface mines. Tables under each section cover total earnings, work schedules, shift differential practices, educational benefits, paid holidays, vacations, health insurance, retirement plans, occupational averages by size of mine, and occupational earnings by state or region. Appendixes describe the survey methodology and forty specific mining occupations. (AA)

FIGURE VI-7: SAMPLE OF AN INFORMATIVE/INDICATIVE ABSTRACT

When it is necessary, in an otherwise informative abstract, to note the document's tables, figures, extensive references, or appendixes, the abstractor may often achieve the desired separation of styles by placing this information at the end of the abstract. (For other techniques, see the *ERIC Abstracting/Indexing Workbook*.)

In summary, the informative abstract does what the indicative cannot. It shows the meaningful, coherent relationship between the author's ideas and arguments. As a result, it distinguishes between major and minor information in a document and between this document and others on the same subject. For these reasons, and because it summarizes the content of a document rather than merely giving a generalized account, the informative approach has more utility to the user than other approaches and should be preferred. *Informative abstracts should be used for the majority of documents.* The indicative approach should be used only in those cases where a document cannot be properly abstracted using solely the informative style.

Although two "pure" types of abstracts can be distinguished, the abstractor should, in all practicality, realize that in describing a document's content in an indicative abstract, some information about substance is also being conveyed. Similarly, an informative abstract may in the normal course include some information bordering on the "Table of Contents."

B. Selection of Abstract Type

The decision to write an informative, indicative, or mixed abstract depends upon the format or structure of the document and the author's organization of the information. The abstractor's reading time will be used to best advantage if this decision is made early. An abstractor should therefore start by examining the document to determine what kind of abstract is required. The following questions might be asked:

- What is the type of document in hand?
- What kind of abstract would be most helpful to the user?
- Is there too much material to be covered in an informative abstract?
- Will the author's abstract, if any, suffice, or must it be augmented?

1. Informative Abstract

A document with a developed thesis that can be summarized accurately usually requires an informative abstract. Many of the documents in the ERIC data base are of this type, e.g.:

- Research Reports;
- Speeches/Presentations;
- Dissertations.

2. Indicative Abstract

The content of some documents may be varied, broad, or designed for reference purposes. Attempts to summarize such documents may distort their content and thereby mislead the user. An indicative abstract is preferable in such cases. The following types of documents usually require indicative abstracts:

- Bibliographies;
- Conference Proceedings;
- Reviews of Research.

3. Informative/Indicative Abstract

If a document has many tables, graphs, charts, attachments, appendices, etc., along with substantive text, it may be appropriate to write a mixed abstract. The following types of documents often have such characteristics:

- Textbooks;
- Curriculum Guides or Teacher Guides;
- Administrative or Program Reports.

C. Content and Emphases of an Abstract

An abstract should be *weighted* in the same proportions and with the same emphases as the document. (Weighting simply means that an abstract should reflect the author's major and minor points as they were expressed in the document. If an abstract glosses over or deletes an important point and highlights a minor point, the abstract is improperly weighted.)

Properly weighting the abstract can be accomplished by transmitting accurately, clearly, and completely the essential information in a document. The reader should never be unsure as to the content of a document and must be able to find in the *document* the full corresponding information mentioned in the *abstract*.

Although by its nature abstracting is a process of selection, the abstractor must remain objective and must be faithful to the content of the document. Particular personal or professional prejudices should never be introduced, either explicitly or implicitly. Evaluations, unless they

are the author's, should never be part of the abstract. An abstractor should consider the following categories of information when writing an abstract, though no one abstract is likely to include information in all categories.

1. Subject Matter, Scope, and Purpose of Document

Whenever possible, this should be a summary or condensation of the actual subject matter substance of the work, rather than a mere description or listing of its contents.

2. Publication/Document Type

Indicate in the abstract the general form or organization of the work, e.g., whether it is a collection of essays, literature review, humorous piece written with tongue-in-cheek, in-depth analysis, expose, eyewitness account, commission/committee report, research report, case study, or report of a controlled experiment.

NOTE: This information, essential for a stand-alone abstract, is also coded systematically into the Publication Type cataloging field.

3. Author's Viewpoint/Bias

What is the author's viewpoint (i.e., anthropological, sociological, or psychological)? Is one theme or approach emphasized over all others?

4. Intended Audience

Is the work oriented toward the theoretician, practitioner, student, parent, teacher, administrator, or researcher? Is a specific grade level or education level indicated for curriculum material presented?

5. Relationship to Other Works (When Stated by Work in Hand)

Is the work new, claimed as a breakthrough, or does it parallel other work? Do the conclusions reached or methods used contradict other prior work or is it directly inspired by prior work?

NOTE: However, if referring only to specific related accessions, use the NOTE field.

6. Intended Use

Does the work contain materials intended for specific application, e.g., a curriculum supplement, classroom exercises, etc.?

7. Special Features

Does the work include a large bibliography, glossary, or classification scheme? Do the illustrations include color plates or maps? Is there an index? Are survey instruments or testing devices included? Is the work part of a related series?

NOTE: Some of this information may be covered adequately by the cataloging; some may require elaboration in indicative portions of the abstract.

8. Results or Findings

Were there any formal conclusions, results, findings, or recommendations reached by the work that should be covered?

D. Audience for the Abstract

The users of the ERIC system are most frequently professionals (teachers, researchers, and administrators) from many different areas of specialization in the field of education. There is, however, a large audience of potential users (new teachers, graduate students, librarians, information center personnel), or people who have only a related interest in the field (but still want to be informed), who may not be familiar with the technical jargon of a particular subject matter area. Therefore, each abstract should be written in a comprehensible style.

No abstract, then, should be so narrow in outlook, or use language so indigenous to one particular field, that it cannot be read with some understanding by all the users of the system. (Author abstracts will, of course, tend more than abstracts supplied by others to reflect the language and style of the original document.) Documents written in highly technical language (not emulated by the abstract) may require some indication of this fact in the abstract. Yet the abstractor should assume that the readers share a basic core of knowledge (most readers will know much more, of course); therefore, an abstract should not dwell unnecessarily on background information or on commonplace ideas. Lastly, an abstractor should always remember that the abstract is being written for a user who has not seen the document.

E. Rules and Authorities for Writing Abstracts

1. Style to Be Used in Writing Abstracts

a. General Rules and Authorities

Brevity, succinctness, and clarity are essential characteristics of a well-written abstract. Brevity is achieved by writing the most compact and concise abstract possible. Do not ramble. Too many words may indicate that the abstract is including details not directly significant, instead of concentrating on the principle ideas and facts. Avoid the unnecessary. Information already apparent from the title should not ordinarily be repeated directly or paraphrased, though exceptions to this rule will arise.

Clarity in style is achieved by following scrupulously the accepted rules for good writing. Rules about the mechanics of style (punctuation, spelling, capitalization, numerals, etc.) are covered well in the *GPO Style Manual*. For rules about grammar, the *Harbrace College Handbook* is a valuable reference. Useful sources of information about style and writing standards are listed in Figure VI-8.

b. Specific Rules

(1) Length

Abstracts ordinarily are limited to approximately 200 words. Within this limitation, there is no preferred length for an abstract, because the appropriate length is determined by the content of the document.

(2) Format

(a) Paragraphs

An abstract is always one paragraph long. The accepted rules about paragraph writing must be followed, especially those concerning coherence and unity. A coherent paragraph contains connected sentences, each following the other in logical order. An abstractor can avoid writing a paragraph that is nothing more than a series of sentences, each one summarizing a separate topic in the document, by intelligent use of transitional words and phrases.

A paragraph should have a *topic sentence*, some central statement of the document's major thesis, from which the rest of the sentences can develop. (This is especially important in an *informative abstract*.) Generally, the topic sentence is the first sentence of the abstract, and because it occupies this strategic position, it should be as full and accurate a statement as possible of the hypothesis, what was studied or researched and why, the methodology employed, and the study population.

(b) Sentences

Sentence length should vary as much as possible to avoid the unpleasant effect of a series of short, choppy sentences. Be terse, not telegraphic. Use complete sentences, omitting neither verbs nor conjunctions. Avoid the overlong, complex sentence in which the abstractor piles up clauses and phrases, especially qualifiers and modifiers, in an attempt to include as much as possible in one sentence. Every sentence should have high information density and, without being cryptic, convey a maximum amount of information in a minimum number of words.

American National Standards Institute. *Writing Abstracts*. 1979.
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FIGURE VI-8: GUIDES, AUTHORITIES, AND STANDARDS COVERING ABSTRACTS AND WRITING STYLE

(3) Language and Vocabulary

To best convey the flavor of the original document and to facilitate retrieval based on natural text, incorporate key words from the document into the abstract (especially if they are repeated often). Avoid direct quotations, however, for they usually do not carry enough information to be excerpted. However, single words or short phrases should be quoted if the author has coined a new phrase that is seminal to the study and if failure to call attention to it would be misleading. New or technical terms should be defined briefly. Also, polemical, controversial, or exceptionally suggestive words may be placed within quotation marks. The abstractor should avoid beginning with phrases such as:

- This report...
- The purpose of this report (or document) is...

Also, the abstractor should avoid the monotonous repetition of sentences starting with:

- It was suggested that...
- It was found that...
- It was reported that...

or ending with such ineffective phrases as:

- ...are discussed.
- ...are given.

However, passive voice constructions may be justified and even unavoidable when writing indicative abstracts. (See below under "Voice.")

(4) Voice

The *active* voice emphasizes the *doer* of the action, e.g., "*The abstractor read the document.*"

The *passive* voice emphasizes the *receiver* of the action, e.g., "*The document was read by the abstractor.*"

Use the *active* voice whenever possible in an *informative* abstract because it allows for direct expression when summarizing the content of the document and usually requires less space than the *passive* voice.

Use the *passive* voice in an *indicative* abstract to describe and to highlight the process of creating the document. Passive constructions, such as the following, should appear primarily in an *indicative* abstract:

- ...are included...
- ...are discussed...
- ...is presented...
- ...are reviewed...

(5) Tense

The tense of the document can suggest the tense of the abstract. The present tense is proper for an indicative abstract, e.g., "...are listed..." instead of "...were listed...." Strive for tense consistency throughout the abstract.

(6) Abbreviations and Acronyms

Abbreviations should be avoided and acronyms kept to a minimum. If a long phrase with a recognized acronym is used more than once, it may be spelled out the first time it appears in the abstract and the acronym used thereafter. At the time of initial use, the acronym should be placed in parentheses following the term (e.g., Mobilization for Youth (MFY)). This is not necessary, however, if both spelled out version and acronym appear in the title, in which case the acronym may be used by itself throughout the abstract. If it is necessary, because of space limitations, to abbreviate, it is permissible to use the common "shorthand" of the field, e.g.:

- SES for Socioeconomic Status;
- IQ for Intelligence Quotient.

(7) Lists

When it is necessary to list a series of items in the abstract, use the following format:

"The following conclusions were drawn:
(1) xxxxx; (2) xxxxx; and (3) xxxxx."

Parallel phraseology or sentence structure is recommended to facilitate comprehension.

(8) Numbers, Measurement, Time, etc.

Follow the rules in the *GPO Style Manual*, Section 12 on "Numerals." These rules are too extensive to summarize here, but some major points are:

- Arabic numerals are generally preferable to Roman numerals;
- A figure is used for a single number of 10 or more, with the exception of the first word of the sentence;

- Units of measurement and time are expressed in figures;
- The comma is used in a number containing four or more digits.

(9) Abstractor Identification

Each abstract should carry a designation as to its preparer. This identification should be in parentheses at the end of the abstract. The initials of the abstractor should be written without periods, e.g.:

ABSTRACTOR	EXAMPLE
The abstract was written entirely by the abstractor. Use abstractor initials.	(AS)
The abstract was written entirely by the author and was used unchanged.	(Author)
The abstractor revised an author abstract. Both should be credited.	(Author/GDC)
Abstract was obtained from an external service, e.g., the National Technical Information Service.	(NTIS) or (NTIS/AS)

FIGURE VI-9: ABSTRACTOR IDENTIFICATION EXAMPLES

(10) Capitalization of Names of Ethnic Groups

In the case of documents concerned with the two broad racial groups, blacks (Negroes) and whites (Caucasians), abstractors should follow the practice of lower-casing these terms, i.e., "blacks and whites."

In the case of documents concerned with Blacks and/or Whites and other ethnic, national, or racial groups, such as Asian Americans, Hispanics, Orientals, etc., abstractors should follow the practice of using initial capital letters for all group names appearing in the abstract, i.e., "Blacks, Whites, Asian Americans, Hispanics, Orientals."

2. Abstracting Specific Kinds of Documents

The point has already been made that different types of documents require different types of abstracts. Even when dealing with the same type of abstract, however, it may be necessary to vary the approach in order to accommodate different kinds of documents. The following guidelines provide specific advice for some of the more common types of documents.

a. Reports (Research and Technical)

These usually require informative abstracts, which should contain:

- objectives and hypotheses of the research;
- methodology, summarized succinctly, including perhaps subjects, variables, controls, conditions, and tests;

- findings and conclusions (emphasized);
- specific implications and/or recommendations for further research.

If limitations to the study are mentioned, they should be included. Background information should be used only if necessary to explain the objectives. A description of unusual or extensive appendices may be included at the end of the abstract.

b. Speeches/Presentations

These reports usually require informative abstracts which should contain:

- background information only if necessary;
- statement of premise or thesis;
- development of ideas or arguments with proofs and major supporting facts;
- conclusions.

c. Curriculum Guides/Teacher Guides

These usually require indicative abstracts, which should contain:

- subject area and grade level of the curricular material;
- specific objectives of the course;
- particularly interesting methods used;
- supplementary activities and materials suggested.

d. Program Descriptions/Administrative Reports

Because of the large amount of narrative detail, these usually require indicative abstracts, which should contain:

- objectives of the program and identification of the target population;
- types of special teachers and other personnel and total numbers of classes or students involved;
- means or suggested means used to carry out the program;
- special methods used to overcome problems;
- up-to-date progress of the program with any anticipated changes in plans, or, if the program has been completed, a statement of the program's effectiveness.

e. Textbook/Instructional Materials

These usually require indicative abstracts, which should contain:

- objectives of the text, including target student population;
- description of the general nature of the subject matter;
- special methods used in meeting objectives, including notation of illustrations and accompanying activities.

Recounting specific textual material is not necessary, unless doing so will explain methods used in achieving objectives. Tests or measurement/evaluation instruments, accompanying a report as supporting documentation, may be analyzed out as a separate accession (see Section on "Analytics."). The ERIC Clearinghouse on Tests, Measurement, and Evaluation may be consulted if there are questions relating to such material.

f. Bibliographies/Directories

These usually require indicative abstracts, which should contain:

- subjects included;
- reference to annotations, if any;
- dates of materials (earliest to latest);
- types of materials listed;
- potential users or target audience;
- number of entries (approximate, if necessary).

g. Multiple-Author Works (e.g., Conference Proceedings)

Depending on the number of papers included and space limitations, these usually require indicative abstracts, which should contain:

- statement of the subject and scope of the collection;
- narrative-type table of contents, indicating titles and authors.

If there are too many articles to list, distinguish broad subject areas and group the articles.

If a document contains a large number of important papers, Clearinghouse personnel may decide to assign separate accession numbers to items they wish to be handled separately, and write informative abstracts. The resume for the overall document should indicate the processing level of the entire document.

Each resume for papers or sections separately analyzed should be entered at Level III, with a reference to the accession number of the parent item. (See Section on "Analytics.")

h. Tests/Measurement Materials

These usually require indicative abstracts, which should contain:

- purpose and objective of the test;
- forms and levels of the test, including length and whether verbal or non-verbal;
- identification of the group to be tested, including grades, ages, etc.
- description of the testing, scoring, and grading methods to be observed, including time limits, whether individually or group administered, qualifications needed to administer, special equipment needed, etc.
- normative data and any information concerning reliability, validity, and test development.

F. Definition and Function of an Annotation

An annotation is a succinct explanation or description of a particular work. Although closely related to an abstract, an annotation is considerably briefer and therefore usually characterizes rather than summarizes.

In the ERIC system, annotations of no more than 50 words are prepared for journal articles (EJ Accession Series) announced in *Current Index to Journals in Education* (CIJE). The purpose of an annotation is to explain and indicate important facets of content not evident from the Title, Descriptors, or Identifiers and to thereby facilitate the user's search of the periodical literature.

G. General Approach to Annotating

Annotations are recommended for CIJE citations. If the scope of an article is adequately expressed by the title, bibliographic citation, and accompanying Descriptors or Identifiers, an annotation is not required. If, however, the normal entry fails to convey subject content or an important feature or aspect of the substance of an article, an annotation should be added. *If in doubt, always supply an annotation.* The true meaning and utility of an article may be lost because of a clever title (e.g., "Climb the Ladder" or "Send No Box Tops") or a highly technical title (e.g., "The Saint-Cloud Method: What It Can and Cannot Achieve" or "Tandhoff's Disease in a Scottish Family"). When this situation occurs, an annotation must be added.

Either informative or indicative annotations are permissible. However, the brevity of the annotation form presupposes that most annotations will be of the indicative type. An indicative annotation is written from the point of view of an informed and objective third person and describes the content, format, or use of an article. In contrast, an informative annotation presents an objective summary of the author's own ideas, or one or more of the conclusions presented. Because of its size limitations, an annotation of this type will generally not present in condensed form a summary of the article itself. In other words, though the same general approach for developing a concise representation of a document holds true for annotating as well as for abstracting, an annotation, unlike an abstract, doesn't have to be weighted in the same proportions and with the same emphasis as the original article. Lengthy informative annotations should not be used.

As with an indicative abstract, an annotation should avoid evaluative language (particularly negative evaluations) introducing personal or professional prejudices. However, useful "guiding" statements can be used, such as the following:

- "Written for the non-specialist";
- "Designed to be helpful to the practicing English teacher";
- "Attempts a clear explanation of a complex topic."

H. Rules for Writing Annotations

Unless otherwise stated below, the rules that pertain to abstracts also apply to annotations.

1. Length

Annotations should not exceed 50 words. Most annotations will generally be between 30 and 50 words in length; however, there is no fixed lower limit. Author- or editor-provided annotations to articles may be used and re-written to conform to the 50-word limitation, if necessary.

2. Format

Annotations should be only one paragraph long. Whole sentences are preferable, but more telegraphic sentences (than would be used in abstracts) are acceptable. Single descriptive words, simple phrases, or lists may also be used. Since annotations are not necessarily written in full sentences, some of the mechanics of style described in the *GPO Style Manual*, and other authorities, do not pertain.

3. Language and Vocabulary

Since an annotation is basically an attempt to improve on an uninformative title, the annotation should avoid repeating specific terms contained in the Title or Descriptors. In other words, use the annotation to bring in fresh information, rather than to repeat information already available in the entry. This is not a strict prohibition, as circumstances will sometimes necessitate that a term be repeated. If special or unusual words appear in the title, the annotation can be used to explain them. Unlike an abstract, an annotation may be composed of a quotation excerpted from the article (and punctuated as such).

4. Example of Annotation

Title: *Homeplace: Experiencing a National Historic Landmark*

Undergraduates and gifted elementary students collaborated on a study of the architecture and lifestyle associated with Homeplace, an 18th century French Colonial home. The activities culminated in a multimedia exhibit at a local art gallery. (AA)

FIGURE VI-10: ANNOTATION FOR NON-INFORMATIVE TITLE

POSTSCRIPT

The following quotations were assembled by Robert Collison and appear at various places in his book Abstracts and Abstracting Services. They are repeated here, with attribution, for the insight they can provide into the art of abstracting.

Since no one has ever defined a good abstract, the future of abstracting, professional or amateur, seems assured.

L. VANBY

Abstracts were, of course, strongly opposed by those who felt that if God had intended them to publish abstracts they would not have published full papers in the first place.

DEREK DE SOLLA PRICE

Abstracts provide the capability to concentrate within a single publication knowledge that is recorded in a multitude of research papers and technical reports.

IRVING M. KLEMPNER

The abstract was described as a method devised several centuries ago to cope with excessive publication. It is no longer able to cope

MARY L. TOMPKINS

The intent of an abstract is to present the skeletal structure of the original and report the crucial findings or new processes the author presents.

SOCIOLOGICAL ABSTRACTS: User's guide

The quality of abstracts depends largely on the ability of the abstractor to understand the significance of the paper being covered.

E.J. CRANE

Abstracts rarely give the exact information the reader wants to know.

MARIAN P. ANDERSON

The automatic abstracts derivable by present techniques require human editing to achieve adequate communicability.

SYSTEM DEVELOPMENT CORPORATION

The production of an abstract journal seems to be a continuing fight against error.

CHARLES L. BERNIER



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 7: INDEXING

October 1980

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION VII: INDEXING

INDEXING

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INDEXING

SUMMARY OF SIGNIFICANT RULES

1. Descriptors used in the indexing process must be in the *Thesaurus of ERIC Descriptors*. (See Section VIII.)
2. The Identifier Field should be used to index specific entities, such as geographic location, project names, etc. Identifiers must be structured in conformance with the rules contained in Section VIII. Proposed Descriptors are entered in the Identifier field until approved and implemented in the *Thesaurus*.
3. The "major" subject matters of the document, whether expressed as Descriptors or Identifiers, must be asterisked (*) in order to distinguish them from the less substantial or "minor" topics. The following kinds of terms should be avoided as major, where possible:
 - (a) Excessively broad terms, which lack discrimination (e.g., DEVELOPMENT), and which might otherwise collect large numbers of postings in a single journal issue;
 - (b) Educational level, age level, methodology, or publication/document type terms, unless they are the subject of the document.
 - (c) Multiple terms beginning with the same word, thereby causing unnecessary repetitive access in the manual indexes.
4. At least one (1) major Descriptor must be assigned to a document; not more than five (5) major Descriptors are permitted for each document (six if only one major Identifier is used). There is, however, no upper limit on the total number of Descriptors that can be used to index a given document; the average for RIE is around eleven (11) per document.
5. There is no minimum requirement for Identifiers; no more than two (2) Identifiers should be designated as major.
6. Index to the specific level of subject matter covered by the document. Do not automatically index "up" to higher generic levels than the document actually deals with. Do not automatically index "down" to all the sub-elements of the level dealt with.
7. Index in depth, or exhaustively, all significant concepts covered in the document.
8. Index the document and exposition in hand; avoid indexing implications, possible uses, and other aspects referred to, but not actually dealt with.

*Revised September 1981

9. Index on the basis of the entire document, not just a part such as the "Introduction" or "Conclusions."
10. If a document is concerned with a particular educational (grade/academic) level, the indexer must index to that level.
11. Insofar as possible, index terms used should appear (in recognizable form) in the abstract (or title) of the document. This provides the user with a reassuring justification for the use of each index term for that particular item.
12. Index terms are written with initial capital letters. Except when used as the initial word, articles and connectives (prepositions and conjunctions) are not capitalized in a Descriptor. Exceptions to this rule occur in certain Identifiers, e.g., book titles such as "Graduate (The)."
13. Index terms are written without punctuation or special characters, with the sole exception being parentheses (to enclose a qualifier).
14. Over-indexing and under-indexing should be avoided. The excessive use of terms beginning with the same word can lead to over-indexing, as can the unrestrained listing of every concept contained in a small document. Under-indexing usually results from failure to assume the searcher's point of view.

VII. INDEXING

A. Introduction

Any collection of books, articles, reports, or any other recorded information, is of value only when the items in the collection are accessible and can be retrieved. The purpose of indexing is to be able to locate items in a collection according to the characteristics of those items. Access points may be virtually any of the fields of data recorded for the items, e.g.:

- personal author;
- title;
- report number;
- contract number;
- corporate source;
- language;
- accession number;
- subject;
- publication type.

The development of the various non-subject data fields is usually called "Descriptive Cataloging"; the development of the subject-oriented data fields is usually called "Subject Indexing." This section is concerned with the latter, i.e., establishing access to documents by their subject matter.

B. Subject Access

An indexer can establish subject access to the items in a collection in various ways:

- assignment of conventional library "Subject Headings," as can be found on Library of Congress printed catalog cards, e.g. "NUCLEAR REACTORS—TABLES, CALCULATIONS, ETC."
- assignment of the item to a position (identified by number) in a classification scheme, such as the Dewey Decimal Classification or the Library of Congress Classification, e.g., 510.78 or QA76.53.
- identification of key words (as opposed to trivial words) in the title (and perhaps abstract) of the document.
- assignment of index terms other than the conventional library type, e.g., these are called variously "tags," "descriptors," "unit terms," etc.

In ERIC, the indexing system is of the last type. The principal index terms are called Descriptors and the techniques followed are generally those that have been developed over the years under the rubric "Coordinate Indexing." It is not the task of this section to

- discuss all types of indexing. It is necessary, however, to spend some time on the nature of, and the rationale behind, Coordinate Indexing.

C. Coordinate Indexing

1. General

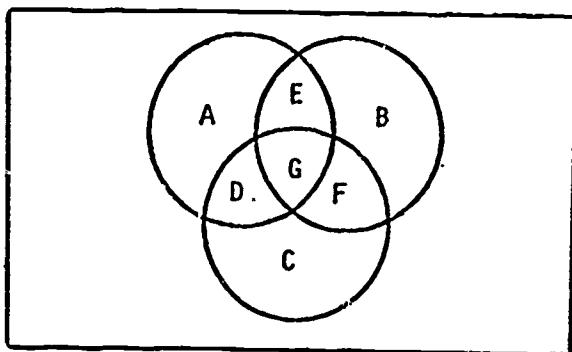
Coordinate Indexing arose from the need to perform indexing in depth. The report literature that began to burgeon in the 1940's could not be adequately characterized, in terms useful for working scientists and technicians, via two or three library subject headings affixed to 3x5 catalog cards. Those working with the report literature desired rather to attach a term or tag to every significant concept in the report. This often involved 10-20 concepts. The possible combinations in subject headings form would have been prohibitive.

The solution arrived at was to largely eliminate the relationships between concepts and rely on unit concepts. The relationships are then picked up or re-constructed by combining several terms in the search procedure. The assignment of index terms which are meant to be put together or coordinated at the time a search is conducted is called "Coordinate Indexing," because the searcher must coordinate the index terms to arrive at the desired result.

2. Searching a File That Has Been Coordinate Indexed

The entire justification for the indexing process lies in the retrieval/searching process. It is important, therefore, for the indexer to understand how searches are conducted. It is a standard admonition to indexers for them to put themselves in the shoes of the searcher.

The strategy used in searching in a coordinate indexing system is generally based on set theory and Boolean* logic. Drawn below is a Venn* diagram consisting of three overlapping circles, labeled A, B, and C. The areas of overlap of two circles are labeled D, E, and F. The overlap of all three is called G.



*See Glossary for definitions.

Let us suppose:

- Circle A represents the documents in the ERIC collection indexed by the Descriptor TEACHING METHODS.
- Circle B represents the documents indexed by the Descriptor SCIENCES.
- Circle C represents the documents indexed by the Descriptor DISADVANTAGED.

The areas of overlap (D, E, and F) represent those documents indexed by *two* of the Descriptors. Area G represents those indexed by *all three* Descriptors.

In phrasing a search question requesting material on methods of teaching science to the disadvantaged, the searcher might specify those documents indexed by both the terms TEACHING METHODS and DISADVANTAGED, i.e., those documents in Areas D and G.

Or the searcher might ask for documents indexed by TEACHING METHODS and either DISADVANTAGED or SCIENCES. This would be those documents in Areas D, E, and G. If the searcher decided to look at documents indexed by TEACHING METHODS and SCIENCES, but *not* in the area of the DISADVANTAGED, this would be those in both A and B, but not in C, resulting in Area E only, excluding area G.

A search for items indexed by all three of the terms (TEACHING METHODS and DISADVANTAGED and SCIENCES) would be restricted to Area G.

All combinations above were specified using the Boolean logical operators AND, OR, NOT.

- AND indicates those things common to two or more groups.
- OR indicates those things in two or more groups, whether or not in common.
- NOT indicates those things not in a particular group or groups.

As can be seen, searching in this way quickly gets complicated and requires special assisting devices such as "double-dictionaries," Uniterm cards, or computers to help make the coordinations. Manual searching can conveniently coordinate only two terms.

3. Terminology in Coordinate Indexing

In discussing Coordinate Indexing, it is important to have available the standard terminology that has developed.

a. Pre-Coordinated Term

This is a concept that is prevalent enough in a given system to warrant representation by a single unique term rather than by terms representing its several components. For example, the ERIC system contains both the single terms TEACHERS and ATTITUDES. The concept "Teacher Attitudes" could be represented by the assignment of these two separate terms. However, this concept appears frequently enough and is searched frequently enough to warrant pre-coordinating the terms (that is, at indexing time, prior to searching) into the single useful index access point TEACHER ATTITUDES. The ERIC system pre-coordinates terms both on the basis of utility, as indicated above, and in order to have maximally useful terms appearing in its printed indexes, which are manually searched.

(Please note that a complex concept, represented by a multi-word pre-coordinated term, can still itself be post-coordinated at search time to form an even more complex concept, e.g. INSERVICE TEACHER EDUCATION and COMPUTER ASSISTED INSTRUCTION.)

b. Post-Coordination

This refers to the action, after (or post) the indexing process, of coordinating two or more terms to make up the desired concept. For example, rather than develop the distinct concept "Italian Speakers" or "Italian Speaking" into a single pre-coordinated term, it might be decided to rely on post-coordination of the two separate terms ITALIAN and NATIVE SPEAKERS.

c. Posting

Posting means to record. A document accession number can be "posted" to a list of similar numbers that have all been indexed by the same term. An index term can, in turn, be "posted" along with other such terms, to a document record. The first usage is the most common; the accession numbers are sometimes referred to as "postings."

d. False Drops

In a coordinate indexing system, terms are often assigned to a document that can go together, but are not meant to. A retrieval based on such an unintended coordination is called a "false drop." For example, a document could be indexed by the terms ACTIVISM, STUDENTS, and TEACHERS. The document dealt with "student activism," but a search aimed at "teacher activism" might retrieve it as a "false drop."

e. Roles and Links

These devices to improve retrieval results are not used in the ERIC system.

- "Roles" refer to additional information attached to index terms to designate the functional sense in which they are used. For example, an extra tag could be added to terms to identify those that refer to elements of the curriculum (as distinct, say, from areas of research).
- "Links" refer to methods of indicating which Descriptors assigned to a document may legitimately be coordinated. Descriptors from the same area of the document are given some similar additional tag. The process is very like the standard library practice of "analyzing out" selected distinct sections of a larger work, treating them as if they were documents in themselves.

D. Indexing for ERIC—Purpose and Approach

The purpose of indexing for ERIC is to provide subject access to the documents announced in RIE and to the articles announced in CIJE. The indexer, or abstractor/indexer, examines the document, chooses the concepts to be indexed, and translates these concepts into the indexing terminology of the system. In the ERIC system, a modified coordinate indexing approach is used and the controlled vocabulary or authority list containing the index terms that may be used is the *Thesaurus of ERIC Descriptors*. The *Thesaurus* lists all terms that can be used by the indexer, together with a display of terms that are Broader, Narrower, or Related to the given term. Cross-references are made from Synonyms, or other terms not to be used, to authorized index terms.

A detailed description of the role and function of the *Thesaurus*, and a bibliography of closely related lexicographic materials, are usually included in the published edition of the *Thesaurus*.

E. ERIC's Modified Coordinate Approach

An indexer in the ERIC system must have two distinct objectives:

- In-depth extraction of all significant concepts in the document so that the machine-readable data base will be manipulatable by these tags and searchers using machines can therefore access them;
- Selective identification of the major concepts in the document for use in preparing printed indexes to the announcement journal and for subsequent manual searching (as well as machine searching).

The in-depth indexing may safely use any term in the authority list. The selective indexing for the benefit of the printed index, however, must keep in mind that manual searching is limited in its ability to coordinate several terms. Therefore, the terms selected to represent the major concepts of the document should in general be at a level of specificity that will be useful to the user. For example, use of the specific single term COUNSELOR TRAINING would be preferable to use of the two broad terms COUNSELORS and TRAINING, and would save the manual user considerable work. The selective indexing is also limited in the number of terms that it can assign due to physical and economic limits on the size of the printed indexes, thereby also arguing for care in finding the specific, perhaps precoordinated, term, rather than several less well targeted terms.

F. Nature of the Educational Literature

Virtually anything can be taught. The field of education, therefore, comprises many subjects and is often dependent on or derived from work that is basically in other disciplines. The literature of education takes many forms. ERIC deals with all significant educational documents regardless of format, e.g.:

- research reports;
- journal articles;
- speeches;
- papers presented at meetings;
- state-of-the-art surveys;
- statistical compilations;
- teacher guides;
- reviews;
- government hearings and legislation;
- curriculum materials;
- bibliographies;
- newsletters, etc.

The methods of inquiry used in these various formats range from the empirical to the philosophically discursive. What controls selection (see Section III) is overall quality and the judgment as to whether the item would be of interest and value to others.

The literature collected, announced, and indexed by ERIC exhibits perhaps more variability than that of any other information system. A laboratory study on the nature of long-term memory, or a dissertation on the educational philosophy of John Dewey, may be announced on the same page as a guide to kindergarten teachers on using finger paints. The literature of education is multifaceted in nearly every sense:

- its topics;
- its approaches and methods;
- its formats;
- the users for whom the literature is intended.

G. Educational Community User Groups

The users of any information system may be divided into two main groups:

1. Internal Users of the System

(information specialists, librarians, document processors, etc., employed by components of the system)

The "internal" users tap the ERIC file in response to a variety of needs:

- telephone and correspondence inquiries;
- searching and preparing bibliographies for clients;
- preparing information analysis products (IAP's) and other publications.

Working in basically the same environment as the indexers, it is relatively easy for the internal users of the system to provide feedback to the indexers (at their own Clearinghouse and at others also) as to access points that are needed and that the indexer should provide whenever relevant. It is common within the ERIC system for each Clearinghouse to have its own list of "most frequently used index terms," which the indexer makes use of specifically to meet internal information needs.

2. External Users of the System

(researchers, scholars, teachers, lay people, etc. in the field)

The "external" users are a heterogeneous group ranging across a broad spectrum from:

- the generalist to the specialist;
- the trained member of the educational community to the untrained lay public;
- the ultra-sophisticated basic researcher to the applied sector occupied by administrators, teachers, legislators, etc.

Indexers must keep in mind these various groups and not slant their indexing solely toward one class or level of user. ERIC indexing must satisfy the needs of all of the above, striking a balance between over-indexing, which can create "red-herrings" for searchers, and under-indexing, which can effectively hide a document from potential users.

Feedback from external users to indexers is often difficult to obtain, but can be extremely valuable as an indicator both of access points needed by the field and new index terms that should be added to the *Thesaurus*.

H. Indexing Tools

There are several publications which are either necessary or very helpful for the indexer to consult during the indexing process:

1. Thesaurus of ERIC Descriptors

All Descriptors used by an indexer must either be in or have been proposed for inclusion in, the *Thesaurus of ERIC Descriptors*. The *Thesaurus* is the major reference used by the indexer in translating the concepts found in the document into terminology acceptable by the system.

The *Thesaurus* is an authority list mechanism which provides control over the indexing vocabulary and helps to ensure consistent use of terms throughout the system. The *Thesaurus* lists all terms which have been formally accepted by the system. Terms which are ambiguous or unusual are provided with definitions/Scope Notes. Cross-references are made from synonyms, or terms not to be used, to the approved word forms. Most main terms carry class membership (generic relationships) information in the form of terms thought to be "Broader" and terms thought to be "Narrower" than the given term. Other types of relationships are noted via the display of "Related" terms.

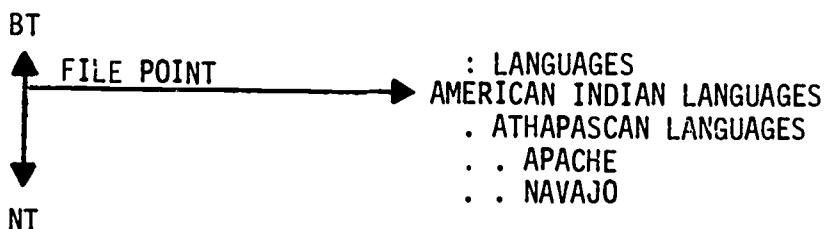
The *Thesaurus* serves both the indexer and the searcher. It brings to the attention of the indexer those terms which might be employed in making a search for the document and it brings to the attention of the searcher those terms which might have been employed by the indexer in describing documents pertinent to the searcher's question. The structured nature of the vocabulary is intended to guide both sets of users towards similar conclusions and actions. A thorough knowledge of and familiarity with the *Thesaurus* is required of all indexers.

The data presented in the *Thesaurus* is available in four formats, each providing the indexer with a different way of entering the *Thesaurus* and moving through it to find the exact terms to use in indexing.

- The Alphabetical Display presents all terms, including Synonyms, arranged alphabetically, together with definitions and complete cross-reference structure. This complete context makes it essential that this display be consulted by indexers before a final decision is made to use any particular Descriptor.
- The Rotated Display provides a permuted alphabetical index to all significant words that form Descriptors in the *Thesaurus* (Synonyms included). In other words,

PASS FAIL GRADING appears under PASS, under FAIL, and under GRADING. This display is useful in determining all usages of a particular word in the *Thesaurus*, without respect to its position in a phrase or multiword Descriptor. It tends to group related terms whereas they may often be separated in the main alphabetic array, thus aiding indexers in performing a more complete search of the *Thesaurus*, search analysts in translating their inquiry into the language of the system, and subject analysts in structuring new Descriptors.

- The Hierarchical Display presents sets of generic tree structures showing, for every term in the *Thesaurus*, the trail of narrower terms below it and broader terms above it, each carried to the farthest extreme. Subordination (or class membership) is indicated via indentions as in the partial tree shown below:



"American Indian Languages" has above it the Broader Term "Languages" and immediately narrower to it the term "Athapascan Languages." "Apache" and "Navajo" are in turn Narrower Terms to "Athapascan Languages."

The Hierarchical Display can be useful to the indexer in finding the most appropriate level of specificity to which to index a document.

- The Descriptor Group Display arranges each of the Descriptors in the *Thesaurus* into one (and only one) of several broad categories, e.g. "Equipment." The display shows each of these categories together with alphabetic arrays of the terms that have been assigned to each. The display is provided for browsing and rapid scanning of large numbers of Descriptors that may be of interest within a broad area. It is meant to provide suggestions and to be of general assistance to those using the *Thesaurus* for indexing, searching, and the structuring of new Descriptors. It is not a formal classification scheme. Each Group is defined by a Scope Note and is represented by a code number.

2. Resources in Education and Current Index to Journals in Education

Prior issues of the announcement journals themselves can be useful:

- in determining how particular terms have been used in the past, i.e., what kinds of documents have they been applied to;
- in determining how documents in a particular series have been indexed in the past.

It is helpful to the users if documents in the same series are given a consistent indexing treatment and can be relied on to be retrievable via the same terms if they deal with the same subject.

3. Descriptor and Identifier Usage Report*

This report provides a complete record of the usage of each index term (both Descriptors and Identifiers) through the last complete year. There is an alphabetic array of every index term that has been used, together with a complete list of all accession numbers that have been indexed by the term, and including a count of how many accessions are listed.

This document can be used as a comprehensive cumulative subject index for the entire file to date (without titles), but the indexer is more likely to use it to determine how many times a term has been used or whether two particular terms have both been used to index the same documents with any frequency:

- a very heavily used term may lead the indexer to feel that it lacks discrimination in the system; the indexer may proceed to use the term, but may (as a result of the research into usage) employ additional terms to attempt to "zero in" on the subject matter better;
- a very lightly posted term, or one posted years ago but not used since, may lead the indexer to question the "currency" of the term and whether it is now much used by either authors or searchers.

4. ERIC Clearinghouse Scope of Interest Guide (Appendix A)

The *ERIC Clearinghouse Scope of Interest Guide* provides a complete description of each Clearinghouse's area of coverage. It also presents, in its full form, lists, or mini-thesauri, of those Descriptors most frequently used by each Clearinghouse.

Inevitably some documents overlap between Clearinghouses. Often the Clearinghouse doing the processing of such a document can gain insight as to how the other Clearinghouse(s) would have indexed the document had it been assigned to them. Examination of this tool can prevent a narrow or parochial indexing approach and can lead to indexing from several potentially useful viewpoints, rather than just that of the particular Clearinghouse in possession of the document.

*Issued over time by various organizations and in various formats.
Currently issued by EDRS on microfiche.

5. Identifier Authority List

The *Identifier Authority List* is a complete alphabetical list of all approved Identifiers. The first edition contained 25,242 approved terms used through April 1976. Semiannual editions are projected.

ERIC indexers should consult the *Identifier Authority List* (IAL) before adding terms to the Identifier fields of RIE and CIJE. In addition to the normal word order position, inverted formats and other possible variations should be checked before creating a new Identifier. If a term is not found in the IAL, the indexer should observe the guidelines and standards for establishing Identifier name forms (see Section VIII).

6. Other Reference Sources

Dictionaries, encyclopedias, glossaries, handbooks, and major textbooks can all aid the indexer in translating the language of a given document into usable index terms. The jargon of specialized fields must be avoided in favor of terms more widely and authoritatively accepted. Terms having different meanings in different fields must not be confused with one another.

Reference works of particular value in researching terminology are listed in the bibliography usually accompanying the printed edition of the *Thesaurus of ERIC Descriptors*. Reference works of particular value in researching Identifiers (place names, project names, test names, etc.) are listed in Section VIII of this Manual.

Records of specific indexing decisions, made at Clearinghouses in problem cases, should be kept for future reference by subsequent indexers at that installation.

I. INDEXING PROCESS

1. General

Indexing begins with the examination of the document. Both indexing and abstracting for the ERIC system should be based on the entire document. Nevertheless, working indexers know that certain sections of documents yield useful information more readily than others. Knowing where to look and to concentrate one's attention can be important to capturing the essence of a document in the allotted time.

Index the document in hand, not the document the writer would like to have written or intends to write the next time. Do not confuse speculation, or referrals to implications and possibilities, with real content.

The indexer should attempt to capture all significant concepts treated in the document. This is called indexing *in-depth* or *exhaustive* indexing. The indexer should index concepts at the generic/specific level actually covered by the document, i.e., index as generically as necessary, but as specifically as possible. For example, if the document concerns itself solely with the Navajo language, index to NAVAJO; do not index to the "higher" or more general levels LANGUAGES or AMERICAN INDIAN LANGUAGES.

Consistency is important in indexing, both among more than one indexer or within the performance of a single indexer (self-consistency). Such consistency, however, is difficult to attain. Indexers should always:

- proceed by rule, rather than by subjective decision;
- be aware that specific entities (such as geographic locations, project names, test names, individuals, etc.) though not in the *Thesaurus* are, nevertheless, indexable via the Identifier field.

A full discussion of the different types of Identifiers and how to structure such terms is provided in Section VIII.

*All concepts selected as significant in the document must be translated into either existing (or proposed) Descriptors and Identifiers. Use the *Thesaurus* or Identifier Authority List to do this. Do not attempt to proceed on the basis of memory. A minor discrepancy in the spelling or ending of a Descriptor will lead to its later rejection by the computer system as invalid. For example:*

ACCEPTABLE: AMERICAN INDIAN LANGUAGES

INVALID: AMERICAN INDIAN LANGUAGE

The same type of minor difference in an Identifier will not cause it to be rejected, but will lead to "scattering." (Scattering occurs when multiple versions of the same basic term appear on the file and in the indexes.) Scattering causes problems during retrieval and must be minimized. For example, if a searcher wanted to find instances where the UNIVERSITY OF CALIFORNIA, LOS ANGELES was the subject of a document, all possible variations of that term that indexers might have employed would have to be searched, if the file contained a lot of "scatter," e.g.:

CALIFORNIA UNIVERSITY AT LOS ANGELES
CALIFORNIA UNIVERSITY (LOS ANGELES)
CALIFORNIA, UNIVERSITY OF (LOS ANGELES)
UCLA
UNIVERSITY OF CALIFORNIA (LOS ANGELES)
UNIVERSITY OF CALIFORNIA AT LOS ANGELES
UNIVERSITY OF CALIFORNIA IN LOS ANGELES
UNIVERSITY OF CALIFORNIA LOS ANGELES

An indexer must decide which concepts in a document are to be considered "MAJOR" and which "MINOR." This is done in order to restrict the size of the printed subject indexes and is also useful later in machine searching in those instances where relevance is more important than recall. MAJOR concepts, whether expressed as Descriptors or as Identifiers, must be asterisked (*). For example:

USED AS MAJOR TERMS

*FAMILY PLANNING
*CONTRACEPTION

USED AS MINOR TERMS

FAMILY PLANNING
CONTRACEPTION

The purpose of indexing is to make a document retrievable. At all times the indexer should evaluate the concepts being selected in terms of a hypothetical searcher:

- Would a searcher after a particular concept be satisfied to retrieve this document?
- Would the searcher be disappointed at the amount of information the document contained on the indexed concept?

Indexing is often described as being both a science and an art. It is scientific in that experimentation and practice over the years have derived good and consistent results. It is an art, however, in that as long as it is done by a human being it remains an expression of the individual judgment of the indexer and is not subject to rigorous consistency and exact results. The guidelines that follow do not and cannot always involve hard and fast rules. They provide indexers with a foundation and a philosophy, but only long experience and practical judgment can develop an expert.

2. Examination of the Document

(Check *Abstractor/Indexer Workbook*, ED 207 614, for this Section)

The experienced indexer is familiar with the information system (documents, vocabulary, users, etc.) and in the examination of documents has learned to focus attention efficiently in several ways, thereby permitting perhaps as few as one or two passes through the document for its evaluation and analysis. The inexperienced indexer, on the other hand, typically requires several passes through the document and engages in extensive paging back and forth.

The indexer should first concentrate on building a basic frame of reference for a given document:

- the document's source (personal author, corporate author, and sponsoring organization);
- its publication date and timeliness;
- its format and general organization;
- its relationship to the entire system, and its potential audience.

The indexer should come away from this brief step with a good idea of who did it, when, why, for whom, who paid, why it was selected, who might be interested, magnitude, etc.

The next step is to inventory and analyze the physical and organizational content of the document. Be aware that content varies greatly among documents.

- Title;
- Abstract;
- Introduction/Preface/Foreword
(which may include historical and theoretical background);
- Description of methodology, experimental design, objectives, materials used;
- Work performed;
- Discussion;
- Results;
- Illustrative material
(graphs, charts, photographs, tables, diagrams);
- Conclusions;
- Summary;
- Recommendations for further work;
- References;
- Appendixes;
- Indexes.

With this information in hand, the indexer can then proceed to a more detailed analysis of the document's subject content. This is usually done in a more selective journalistic sequence, concentrating on those sections revealed by the inventory above to be most information-bearing. The indexer should attempt to verify his or her interpretation of each section against following sections. For example, the Title should be compared with the Abstract, the Abstract with the Summary, and so on, until a clear, verifiable, supportable picture of what the document is really about emerges.

The relationship between the indexing process and the abstracting process should be noted here. The individual who abstracts a particular document inevitably absorbs much information regarding that document. This information may be utilized in the indexing

process. This is particularly easy if the abstractor and the indexer are one and the same person. Indexing terms may be noted marginally or mentally during abstracting for later use (by oneself or others). If the abstractor and indexer are the same person, then the learning-about-the-document process required to perform the one function overlaps with that required for the other function, thereby saving time overall. If the abstractor and indexer are separate individuals, then inevitably both must go through the same learning process, resulting in less efficient staff utilization.

Whether the abstract is author-provided or written or modified by an ERIC abstractor, it is a good idea to see that as many of the indexed concepts as possible appear in the abstract. This provides the user with a reassuring explanation as to why a particular index term was used. In cases where there is no apparent or obvious connection between an index term assigned and the rest of the document description, the user is left puzzled as to whether the item is relevant to his or her needs.

The advent of search systems capable of searching on the full text of a bibliographic record does not really change this advice. The manual use of the records, and their search via systems without full text capability, will exceed for some time to come the volume of full text search activity. Even with a full text capability, it is useful to the user for the record to contain explicitly the information that validates it as an output for a given search.

3. Identification of Indexable Information

A primary rule is to index the document in hand. This rule may sound obvious, but it is easy to be trapped into indexing the implications, applications, projected uses, future directions, etc., of some documents rather than their actual content. This is a pitfall and should be avoided. For example, a bibliography of basic texts in adult education may have been originally compiled to support graduate study in adult education. Nevertheless, GRADUATE STUDY is not the subject matter of the document, but only one of the many possible applications. It should not be selected as an indexable concept.

Negative results can be as indexable as positive results, and as important to the user. For example, a research study may tend to disprove the hypothesis that participation in planning the educational program increases the student's desire to do well academically. The concept ACADEMIC ASPIRATION is definitely indexable insofar as it is one of the primary ideas (in this case a "dependent variable") that the research is investigating.

The indexer must always keep in mind that it is *concepts* that are being indexed, not merely the author's words in which the concept is expressed. An author may choose to use excessively exotic, obscure, specialized, mis-interpreted, colloquial, or otherwise unacceptable language. Do not engage in mere "word indexing." Isolate the concept and meaning behind the words and then choose the words

the system has designated for the concept. (Of course, insofar as it is possible to use the language and terminology of the author and still observe this admonition, then the best of both worlds is served.)

For example, an author may use the term VOCATIONAL EDUCATION in discussing training programs that attempt to make adults employable by providing them with basic skills in reading, writing, and arithmetic. The *Thesaurus of ERIC Descriptors* defines this term, however, in a way that is at variance with this author's usage, as follows:

VOCATIONAL EDUCATION:

Formal preparation for semiskilled, skilled, technical, or paraprofessional occupations usually below the baccalaureate degree.

Examination reveals that the concept the author is really discussing is represented in ERIC by the Descriptor ADULT BASIC EDUCATION, which is defined in the *Thesaurus* as follows:

ADULT BASIC EDUCATION:

Education provided for adults at the elementary level, usually with emphasis on communicative, computational, and social skills.

As can be seen from the above, it should be kept in mind that authors do not necessarily use words precisely and that it is up to the information system to impose its own terminological order on a literature that speaks from many different viewpoints.

Mere mention of any concept within a document does not mean that it is indexable information. If the concept was the reason for the document to be written, or, if without the concept the document would not exist or would be altered significantly, then the concept is indexable information. The indexer should assume the posture of a skeptic who has to be convinced by good evidence of the appropriateness and applicability of any given concept.

To ensure comprehensive and uniform treatment of documents, indexers should always refer to a check list of indexable elements. The use of this check list will help guarantee reasonable exhaustivity in indexing. Documents entering the ERIC system usually contain the following elements of information, which are treated individually in detail immediately following this list:

- Population Concepts
 - Educational (i.e., Grade/Academic) Level
 - Age Level
 - Other Groupings, e.g., ethnic groups, religions, etc.

- Activities/Action Concepts; Methodology/Materials Concepts
- Curriculum Concepts
- Document Form/Type
- Identifiers

a. Population Concepts

Population concepts categorize and identify the group or individual studied by the document or intended as the users of the document. Most important to ERIC users are terms identifying the population's:

- Educational (Grade/Academic) Level;
- Age Level.

However, other categories which may be applicable are:

- Occupation;
- Race or Nationality;
- Religion;
- Intelligence or Ability Level;
- Physical or Emotional Characteristics;
- Socioeconomic Characteristics;
- Sex.

Educational Level must be indexed when appropriate (i.e., when dealt with by documents or journal articles). Age Level should be indexed for materials concerned strictly with age-level populations. Detailed instructions on use of these Levelers follow below. All other population concepts are treated just as any other concepts, and their use is up to the discretion of the indexer.

Examples of some terms in the *Thesaurus* which represent these various population concepts follow:

- Occupation - e.g.,

ACCOUNTANTS
COOKS
COUNSELORS
LIBRARIANS
MEDICAL LABORATORY ASSISTANTS
OPTOMETRISTS
TEACHERS

Note: See also list of Narrower Terms under term OCCUPATIONS, and Descriptor Group "OCCUPATIONS."

- Race/Nationality - e.g.,

AMERICAN INDIANS	JAPANESE AMERICANS
ARABS	KOREAN AMERICANS
BLACKS	LATIN AMERICANS
CHINESE AMERICANS	MEXICAN AMERICANS
CUBANS	MEXICANS
ESKIMOS	NORTH AMERICANS
FILIPINO AMERICANS	POLISH AMERICANS
HISPANIC AMERICANS	PUERTO RICANS
INDIANS	SPANISH AMERICANS
ITALIAN AMERICANS	WHITES

- Religion - e.g.,

AMISH	JEWS
CATHOLICS	JUDAISM
CHRISTIANITY	PROTESTANTS
ISLAMIC CULTURE	PURITANS

- Intelligence/Ability Level - e.g.,

ACADEMICALLY GIFTED	ILLITERACY
DEVELOPMENTAL DISABILITIES	MENTAL RETARDATION
HIGH ACHIEVEMENT	SLOW LEARNERS
LEARNING DISABILITIES	TALENT

- Physical/Emotional Characteristics - e.g.,

AMPUTATIONS	HYPERACTIVITY
BLINDNESS	MENTAL DISORDERS
DEAFNESS	NEUROLOGICAL IMPAIRMENTS
DEAF BLIND	PARANOID BEHAVIOR
DOWNS SYNDROME	PERCEPTUAL HANDICAPS
DRUG ADDICTION	PHYSICAL DISABILITIES
EMOTIONAL DISTURBANCES	PSYCHOSIS
HOSTILITY	SCHIZOPHRENIA

- Socioeconomic Characteristics - e.g.,

ADOPTED CHILDREN	FOSTER CHILDREN
ADVANTAGED	MIGRANTS
CRIMINALS	NOMADS
DELINQUENCY	PRISONERS
ECONOMICALLY DISADVANTAGED	REFUGEES
EDUCATIONALLY DISADVANTAGED	

- Sex - e.g.,

EMPLOYED WOMEN	MALES
FATHERS	MOTHERS
FEMALES	

(1) Educational (Grade/Academic) Level

Many Descriptors in the ERIC *Thesaurus* can be used to identify the educational level being studied or the educational level toward which a document or article is directed. (See Figure VII-1 for a relatively complete list.)

Any of the terms appearing in Figure VII-1 may be used to index a document to the specific educational level with which it deals. Because of the extreme importance of this particular indexing to the retrieval process, however, and because of the large number of terms available to the indexer, a special attempt is made, with the following guidelines, to reduce "scattering."

Fourteen (14) broad Descriptors in this group have been specially identified or defined as subsuming several of the more specific terms. These broad Descriptors and their definitions appear in Figure VII-2. One or more of these special Descriptors must *always* be used to index educational level *when the document deals with such levels*. To assure assigning of an educational level Descriptor when appropriate, indexers are encouraged to select the educational level term first, before further indexing.

An educational level term of major or minor status should be on every document except in cases of:

- Documents where educational level is incidental and not specifically treated.
- Documents that apply to any or all educational levels equally.

The educational level term should be majored only when the central focus of the document is on the subject of that educational level. (See discussion of Major/Minor terms in Section VII.I.5.b.)

An occasional document will need to carry multiple educational levelers. For example, a document on Catholic schools having considerable statistical data for both K-12 schools and institutions of higher education should be indexed by ELEMENTARY SECONDARY EDUCATION and HIGHER EDUCATION. For the vast majority of documents, however, it is appropriate to assign only one educational leveler.

Note that there is a "broader-narrower" relationship between some of the 14 broad level Descriptors (not corresponding exactly to the strict hierarchical relationships of the ERIC *Thesaurus*). The use of a narrower term would, of course, obviate the need to also use its broader term, and vice versa. For example, a document indexed by PRESCHOOL EDUCATION need not also be indexed by EARLY CHILDHOOD EDUCATION. (See discussion on indexing specificity in Section VII.I.5.a.)

ADULT BASIC EDUCATION	HIGH SCHOOL EQUIVALENCY PROGRAMS
ADULT EDUCATION	HIGH SCHOOL FRESHMEN
ADULT PROGRAMS	HIGH SCHOOL GRADUATES
COLLEGE BOUND STUDENTS	HIGH SCHOOL SENIORS
COLLEGE CURRICULUM	HIGH SCHOOL STUDENTS
COLLEGE FRESHMEN	HIGH SCHOOLS
COLLEGE GRADUATES	HIGHER EDUCATION
COLLEGE INSTRUCTION	INSERVICE EDUCATION
COLLEGE PREPARATION	INTERMEDIATE GRADES
COLLEGE PROGRAMS	JUNIOR HIGH SCHOOL STUDENTS
COLLEGE SENIORS	JUNIOR HIGH SCHOOLS
COLLEGE STUDENTS	KINDERGARTEN
COLLEGES	KINDERGARTEN CHILDREN
COMMUNITY COLLEGES	MASTERS PROGRAMS
DOCTORAL PROGRAMS	MIDDLE SCHOOLS (= Grades 4-9 or some segment thereof)
EARLY CHILDHOOD EDUCATION	NONCOLLEGE BOUND STUDENTS
ELEMENTARY EDUCATION	NURSERY SCHOOLS
ELEMENTARY SCHOOL CURRICULUM	POSTDOCTORAL EDUCATION
ELEMENTARY SCHOOL STUDENTS	POSTSECONDARY EDUCATION
ELEMENTARY SCHOOLS	PRESCHOOL CHILDREN
ELEMENTARY SECONDARY EDUCATION	PRESCHOOL CURRICULUM
EXTERNAL DEGREE PROGRAMS	PRESCHOOL EDUCATION
GRADE 1	PRIMARY EDUCATION
GRADE 2	PROFESSIONAL EDUCATION
GRADE 3	SECONDARY EDUCATION
GRADE 4	SECONDARY SCHOOL CURRICULUM
GRADE 5	SECONDARY SCHOOL STUDENTS
GRADE 6	SECONDARY SCHOOLS
GRADE 7	SPECIAL DEGREE PROGRAMS
GRADE 8	TWO YEAR COLLEGE STUDENTS
GRADE 9	TWO YEAR COLLEGES
GRADE 10	UNDERGRADUATE STUDENTS
GRADE 11	UNDERGRADUATE STUDY
GRADE 12	UNIVERSITIES
GRADUATE STUDENTS	UPPER DIVISION COLLEGES
GRADUATE STUDY	

FIGURE VII-1: EDUCATIONAL LEVEL DESCRIPTORS—COMPLETE LIST

- **EARLY CHILDHOOD EDUCATION**
Scope Note: Activities and/or experiences that are intended to effect developmental changes in children, from birth through the primary units of elementary school (grades K-3).
- ● **PRESCHOOL EDUCATION**
Scope Note: Activities and/or experiences that are intended to effect developmental changes in children, from birth to entrance in kindergarten (or grade 1 when kindergarten is not attended).
- ● **PRIMARY EDUCATION**
Scope Note: Education provided in kindergarten through grade 3.
- **ELEMENTARY SECONDARY EDUCATION**
Scope Note: Formal education provided in kindergarten or grade 1 through grade 12. .
- ● **ELEMENTARY EDUCATION**
Scope Note: Education provided in kindergarten or grade 1 through grade 6, 7, or 8
- ● **ADULT BASIC EDUCATION**
Scope Note: Education provided for adults at the elementary level (through grade 8), usually with emphasis on communicative, computational, and social skills.
- ● **PRIMARY EDUCATION**
Scope Note: (See above.)
- ● **INTERMEDIATE GRADES**
Scope Note: Includes the middle and/or upper elementary grades, but usually 4, 5, and 6.

- ● **SECONDARY EDUCATION**
Scope Note: Education provided in grade 7, 8, or 9 through grade 12.
- ● ● **JUNIOR HIGH SCHOOLS**
Scope Note: Education provided in grades 7, 8, and 9—less commonly 7 and 8, or 8 and 9.
- ● ● **HIGH SCHOOLS** (Changed from "Senior High Schools" in March 1980.)
Scope Note: Providing formal education in grades 9 or 10 through 12.
- ● ● **HIGH SCHOOL EQUIVALENCY PROGRAMS**
Scope Note: Adult educational activities concerned with the preparation for and the taking of tests which lead to a high school equivalency certificate, e.g., General Educational Development program.
- **POSTSECONDARY EDUCATION**
Scope Note: All education beyond the secondary level—including learning activities and experiences beyond the compulsory school attendance age, with the exception of adult basic education and high school equivalency programs. (Before APR75, restricted to "education beyond grade 12 and less than the baccalaureate level.")
- ● **HIGHER EDUCATION**
Scope Note: All education beyond the secondary level leading to a formal degree.
- ● **TWO YEAR COLLEGES** (Changed from "Junior Colleges" in March 1980.)
Scope Note: Public or private postsecondary institutions providing at least 2, but less than 4, years of academic and/or occupational education.

FIGURE VII-2: MANDATORY "EDUCATIONAL LEVEL" DESCRIPTORS

(Procedure implemented February 1975)

Other Descriptors, which may be similar in form and meaning to any of the 14 broad level Descriptors, should not be used as educational level descriptors *per se*. They may, however, be fully used for other indexing applications. For example:

MANDATORY TERMS FOR INDEXING EDUCATIONAL LEVEL	CLOSELY RELATED TERMS
PRESCHOOL EDUCATION	PRESCHOOL CURRICULUM
ELEMENTARY EDUCATION	ELEMENTARY SCHOOLS
JUNIOR HIGH SCHOOLS	JUNIOR HIGH SCHOOL STUDENTS

Chronological age may often be used in determining the educational level of a population group. For instance, if 5-9 year olds represent the target population of a study, the indexer can assume (unless the document or article describing the study indicates otherwise) that the educational level is "grades K-3" or PRIMARY EDUCATION.

NOTE: There are cases where grade and age level correspondence would not hold true:

- mentally handicapped persons whose chronological ages and mental ages do not match.
- gifted persons whose mental age is above their normal age-grade placement.
- persons of compulsory school age who have been excused from attending school.

Hopefully, the educational level of these groups would be specified in the document or article because the indexer could not assume educational level strictly on the basis of age level. In most instances, however, age level may be used to determine educational level. (See conversion list displayed in Figure VII-3.)

Grade level ranges may also, like age, be used to determine the appropriate educational level Descriptor to use. (See Figure VII-4.)

The indexer should not confuse the intermediate or middle grades with the so-called "middle school level." The concept "middle school" has never been standardized and should not be used as an educational level term. Usually thought of as a replacement for the junior high school level, the most commonly agreed-upon "middle-school" grade-level ranges are:

- 7-8 and
- 6-8,

CHRONOLOGICAL AGE	CORRESPONDING BROAD EDUCATIONAL LEVEL DESCRIPTOR
0-9	EARLY CHILDHOOD EDUCATION
0-5,6	PRESCHOOL EDUCATION
5-9	PRIMARY EDUCATION
5-12,13,14	ELEMENTARY EDUCATION
5-18	ELEMENTARY SECONDARY EDUCATION
9-12,13,14	INTERMEDIATE GRADES
12,13,14-18	SECONDARY EDUCATION
12-15	JUNIOR HIGH SCHOOLS
14,15-18	HIGH SCHOOLS
Adult	ADULT BASIC EDUCATION
Adult	HIGH SCHOOL EQUIVALENCY PROGRAMS
Adult	POSTSECONDARY EDUCATION
Adult	HIGHER EDUCATION
Adult	TWO YEAR COLLEGES

FIGURE VII-3: CHRONOLOGICAL AGE TO EDUCATIONAL LEVEL CROSS-REFERENCE TABLE

GRADE LEVEL	CORRESPONDING BROAD EDUCATIONAL LEVEL DESCRIPTOR
K-12	ELEMENTARY SECONDARY EDUCATION
K-8, 1-6, 1-8	ELEMENTARY EDUCATION
1-3	PRIMARY EDUCATION
4-6, 5-8	INTERMEDIATE GRADES
6-8, 7-8, 7-9, 7-10	JUNIOR HIGH SCHOOLS
9-12, 10-12	HIGH SCHOOLS
*13-14, 14-16, 15-16	HIGHER EDUCATION

*When appropriate, use TWO YEAR COLLEGES for grade level range 13-14.

FIGURE VII-4: GRADE LEVEL TO EDUCATIONAL LEVEL CROSS-REFERENCE TABLE

but other possible ranges include:

- 4-7,
- 5-8,
- 6-9, and
- 7-9.

Thus, the Descriptor MIDDLE SCHOOLS should be used as an index term only when the document or article itself uses it, and only with an appropriate educational level Descriptor.

It is worth noting that the term ADULT EDUCATION was not included in the list of broad educational level Descriptors precisely because it does not discriminate this factor; it may overlap the elementary (adult basic), secondary (high school equivalency), and postsecondary levels. Documents on "lifelong" and/or "adult" education (excluding the educational leveler ADULT BASIC EDUCATION) do not necessarily require an educational level Descriptor. It is assumed that such documents would be indexed by LIFELONG LEARNING, ADULT EDUCATION, or a narrower term in the ADULT EDUCATION hierarchy.

The following examples are intended to show some typical situations that the indexer might face in indexing by educational level..

● Example 1:

A document on *Enrollment Patterns at Prince George's Community College* might be indexed:

DESCRIPTORS: ASSOCIATE DEGREES; *COMMUNITY COLLEGES; ENROLLMENT; ENROLLMENT RATE; *ENROLLMENT TRENDS; TWO YEAR COLLEGES; *TWO YEAR COLLEGE STUDENTS; ETC.

IDENTIFIERS: PRINCE GEORGES COMMUNITY COLLEGE MD; ETC.

Prince George's Community College is a 2-year institution with terminal occupational and bachelor's creditable programs. COMMUNITY COLLEGES should be included as a major Descriptor because of its specificity, but accompanied by the leveling term TWO YEAR COLLEGES as a minor entry.

● Example 2:

A document on *Teaching About Africa—Social Studies Activities for Seventh Graders* might be indexed:

DESCRIPTORS: *AFRICAN CULTURE; *GRADE 7; JUNIOR HIGH SCHOOLS; *SOCIAL STUDIES; TEACHING METHODS; UNITS OF STUDY; ETC.

IDENTIFIERS: *AFRICA, ETC.

The leveling term JUNIOR HIGH SCHOOLS is added as a minor Descriptor complementing the major and more specific Descriptor GRADE 7. Although overlapping between the general concepts of ELEMENTARY EDUCATION and SECONDARY EDUCATION, GRADE 7 (also GRADE 8) would normally be used with JUNIOR HIGH SCHOOLS, unless such indexing would mislead users.

• Example 3:

An article on *Evaluation of Arithmetic Units in Grades 3, 5, and 7* might be indexed:

DESCRIPTORS: *ARITHMETIC; *CURRICULUM EVALUATION; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL MATHEMATICS; GRADE 3; GRADE 5; GRADE 7; ETC.

Although ELEMENTARY EDUCATION is included as the leveling term, ELEMENTARY SCHOOL MATHEMATICS is asterisked (made Major) because of its specificity. The specific grade terms are added as an indexing option; in this case, they are not asterisked, as the author of the article indicates general transferability of his conclusions to arithmetic units in grades 4 and 6.

• Example 4:

A document on *Differential Diagnostic Evaluations of Aurally Handicapped Children in Grades K-6, With Emphasis on Kindergarten Children to Allow Major Corrective Measures Prior to Entry into First Grade* might be indexed:

DESCRIPTORS: *AUDITORY EVALUATION; DIAGNOSTIC TESTS; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL STUDENTS; *HEARING IMPAIRMENTS; KINDERGARTEN CHILDREN; ETC.

ELEMENTARY EDUCATION is the leveling term corresponding to grades K-6. ELEMENTARY SCHOOL STUDENTS is starred (made Major) because of its specificity. KINDERGARTEN CHILDREN is included as a minor term because of the particular emphasis at this level.

• Example 5:

An article on *New Curriculums for Preparing Educational Administrators—Providing Leadership for the 1980-1985 Public Schools* might be indexed:

DESCRIPTORS: *ADMINISTRATOR EDUCATION; *CURRICULUM DEVELOPMENT; *EDUCATIONAL ADMINISTRATION; EDUCATIONAL NEEDS; ELEMENTARY SECONDARY EDUCATION; HIGHER EDUCATION; PUBLIC SCHOOLS; ETC.

Two leveling terms, HIGHER EDUCATION and ELEMENTARY SECONDARY EDUCATION are used. The former covers the level of training discussed in the article; the latter covers the educational level of the ultimate target group.

• Example 6:

A document on *Preparing Teachers, Students, and Citizens to Deal with the Problems and Potentialities of the Aged* might be indexed:

DESCRIPTORS: *GERONTOLOGY; POSTSECONDARY EDUCATION; ETC.

POSTSECONDARY EDUCATION sufficiently covers the educational level here. HIGHER EDUCATION would not be indexed unless the document covered training programs leading to a formal degree. ADULT EDUCATION is too broad and, therefore, not used.

Note the absence of the Descriptor OLDER ADULTS. The post-coordination of OLDER ADULTS and POSTSECONDARY EDUCATION would most likely be used for "education for, rather than about, 'older adults',' in which case, this document would be a false drop.

• Example 7:

A document on *Establishing a Language Laboratory to Teach English to Non-English Speaking, Inner City Youth to Help to Overcome Linguistic and Cultural Handicaps* might be indexed:

DESCRIPTORS: *DISADVANTAGED YOUTH; *ENGLISH (SECOND LANGUAGE); *LANGUAGE LABORATORIES; *NON ENGLISH SPEAKING; SECOND LANGUAGE INSTRUCTION; ETC.

Though designation of educational level might be applicable in this case, none could be indexed without further information.

- Example 8:

An article on *The Influence of Teachers on Religious Beliefs and Moral Values* might be indexed:

DESCRIPTORS: EDUCATIONAL OBJECTIVES; *MORAL VALUES; *RELIGION; RELIGIOUS EDUCATION; *STUDENT TEACHER RELATIONSHIP; TEACHER ATTITUDES; *TEACHER INFLUENCE; ETC.

Educational level does not appear to be applicable in this case. The material appears to be open to all levels.

- Example 9:

An article on *Government and Academia: The Federal Government's Increasing Role in Higher Education* might be indexed:

DESCRIPTORS: ACADEMIC FREEDOM; COMPLIANCE (LEGAL); *FEDERAL REGULATION; GOVERNMENT ROLE; *GOVERNMENT SCHOOL RELATIONSHIP; *HIGHER EDUCATION; INSTITUTIONAL AUTONOMY; ETC.

Here, unlike any of the preceding examples, the educational leveler is made a major Descriptor. HIGHER EDUCATION, in consideration of other related Descriptors, provides adequate precision in regard to this article's subject.

(2) Age Level

The ten Descriptors listed in Figure VII-5 are used to index age level in the ERIC system. Each covers a specific age range. One or more of these Descriptors should be posted to ERIC documents or journal articles concerned strictly with age-level groups or populations. However, the use of specific terms such as ADOPTED CHILDREN and ADULT DROPOUTS would obviate the need to also index generic terms such as CHILDREN and ADULTS.

Unlike educational levelers, age level Descriptors are not to be considered "mandatory." Appropriate mandatory educational levelers must always be considered first and be given precedence over age levelers. For instance: a document properly indexed with EARLY CHILDHOOD EDUCATION (mandatory educational leveler) would not usually carry the age leveler YOUNG CHILDREN, unless a subset of the total population with which the document is concerned

falls outside the scope of early childhood education. (In other words, the use of YOUNG CHILDREN would be appropriate if a part of the subject population is not adequately conveyed by the activities and experiences with which early childhood education is normally concerned.)

"AGE LEVEL" DESCRIPTORS	
INFANTS	Aged birth to 24 months.
YOUNG CHILDREN	Aged birth through 8 years.
CHILDREN	Aged birth through 12 years.
PRESCHOOL CHILDREN	Aged 2 through 5 years.
PREADOLESCENTS	Aged 9 through 12 years.
ADOLESCENTS	Aged 13 through 17 years.
YOUNG ADULTS	Aged 18 through 30 years.
ADULTS	Aged 18 years and over.
MIDDLE AGED ADULTS	Aged 45 through 64 years.
OLDER ADULTS	Aged 65 years and over.

FIGURE VII-5: "AGE LEVEL" DESCRIPTORS

b. Action Concepts and Materials Concepts

Activities or action concepts include such terms as:

- Instruction;
- Testing;
- Experiments, etc.

Methodology and materials concepts include such terms as:

- Language Laboratories;
- Objective Tests;
- Filmstrips, etc.

Often a decision must be made as to whether the document is about the activity, about the materials, or about both. (In certain instances, the activity and the methodology might be essentially the same.)

For example, if a document is about testing, making only slight mention of methods and specific tests, then it should be indexed by TESTING. However, do not use TESTING when more precise Descriptors are available (MINIMUM COMPETENCY TESTING, TESTING PROGRAMS, etc.).

If it is about the development or use of a specific kind of test (i.e., aptitude tests), then it should be indexed by APTITUDE TESTS, not by TESTING.

If, however, the document is about testing, and various aptitude tests were used, it should be indexed by TESTING (or a more precise "testing" term), by APTITUDE TESTS, and by the names of the specific aptitude tests for which data and results were presented.

c. Curriculum Concepts

This refers to the educational subject or concept that is being administered, taught, or measured. Examples are:

- Arithmetic;
- History;
- Learning Disabilities;
- Reading;
- Spatial Ability, etc.

Those concepts that are actively and substantially treated by the document are indexable. For example, if a teaching method is used for arithmetic and this is reported and described in detail, then the document should be indexed by ARITHMETIC, along with terms describing the method, the persons being taught, etc. However, if the document mentions that this method might also be used for teaching music, but does not describe this use of the method, then the document should not be indexed by MUSIC.

d. Document Form/Type

It is a valid indexing concern to wish to record and store the information describing whether a document is a textbook, curriculum guide, dissertation, or other well-known form. Use of such specific information can often aid retrieval. For example, a search for textbooks on mathematics for adults probably would not wish to retrieve documents dealing with textbook writing. The former can be indexed by TEXTBOOKS; the latter by TEXTBOOK PREPARATION.

Similarly, specific curriculum guides can be distinguished from the act of curriculum preparation by using the Descriptors CURRICULUM GUIDES and CURRICULUM DEVELOPMENT, respectively. Not all situations can be handled in this matter, and it may be necessary to rely on coordination of index terms to distinguish concepts.

From ERIC's beginning in 1966 through mid-1974, the only way to index by document/publication form or type was via Descriptors or Identifiers. In mid-1974 the "Publication Type" data element was added to the ERIC Resume Form, and catalogers began automatically tagging each and every accession with a code representing its form (see Figure VII-7).

With the inception of this new cataloging element (which is machine manipulable and can be searched or made to print out with each resume), it becomes necessary to coordinate the assignment of the PUBTYPE code with the assignment of Descriptors that can represent form.

Many Descriptors can be used for tagging publication types. A fairly comprehensive list appears in the cataloging rules pertaining to PUBTYPE and is repeated here as Figure VII-6. There are twenty-two (22) Descriptors that are not used for this purpose, however, because such use would essentially duplicate the coding of the PUBTYPE field. Each of these 22 terms carries the following note in the *Thesaurus*: "CORRESPONDS TO PUBTYPE CODE XXX—DO NOT USE EXCEPT AS THE SUBJECT OF A DOCUMENT." These 22 Descriptors and their corresponding PUBTYPE codes are listed in Figure VII-8.

All other Descriptors that represent form (e.g., DIARIES) should generally be used in indexing as minor Descriptors. Only when representing the subject of the document in hand should they be used as major Descriptors.

e. Identifiers

Frequently a part of a document's indexable information are:

- proper names of persons;
- geographic locations;
- proper names of organizations;
- projects, etc.

PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE	PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE	PUBLICATION TYPE	PUBTYPE CODE MOST APPLICABLE
Abstracts	131	Filmographies	131	Photograph Records	100
Administrator Guides	055	Films	100	Photographs	100
Annotated Bibliographies	131	Filmstrips	100	Poetry	030
Annual Reports	141	Flow Charts	100	Position Papers	120
Answer Keys	160	Foreign Language Books	010-170	• Practicum Papers	043
Answer Sheets	160	Foreign Language Films	100-170	Program Descriptions	141
Anthologies	020	Foreign Language Periodicals	022-170	Program Evaluation	142
[Archival Documents]	060			Program Guides	141
Atlas	133	Games	999 or 051	Program Proposals	141
Audiodisc Recordings	100	Glossaries	134	[Programed Texts]	010 and 051
Audiotape Recordings	100	Graphs	100	Puzzles	999
• Audivisual Ads	100	Guidelines	050 or 052 or 055		
Autobiographies	060	• Guides	050 or 051 or 052 or 055	Questionnaires	160
• Bibliographies	131	Hearings	090	Rating Scales	160
[Bilingual Materials]	171	[Historical Reviews]	060	[Recommendations]	120
Biographical Inventories	060 (1132)	Illustrations	100	Records - Forms	100 or 110 or 050
Biographies	060	Indexes	130 or 131	• Reference Materials	130 (1010)
[Booklists]	131	[Information Analyses]	073 or 071	[Regulations]	090
Books	010	Instructional Materials	051	• Reports	140
Book Reviews	070	Interviews	120 or 160	[Research Methodology Guides]	065
Bulletins	022	Item Banks	160	Research Proposals	143
[Bylaws]	050			• Research Reports	143
Cartoons	100 (1030)	I. Journal Articles	080	[Research Reviews (Publications)]	070
Case Records	141 or 143 or 140	[Journals]	022	Resource Materials	050 or 051 or 052 or 055
Case Studies	141 or 143 or 140	[Judicial Materials]	090	Scholarly Journals	022
Catalogs	132	Kinescope Recordings	100	School Newspapers	022
Charts	100	Laboratory Manuals	051	School Publications	Document Dependent
Check Lists	130 or 160	[Language Guides]	051 or 130 (170)	Scripts	030
[Childrens Books]	010 030	Large Type Materials	051	• Serials	022
Childrens Literature	010, 030	Leaders Guides	052	Short Stories	030
Chronicles	060 (1020)	[Lecture]	150 (C51)	Slides	100
Citation Indexes	131	Illegal Analysis	090	Specifications	090
[Class Newspapers]	022	Legislation	090	• Speeches	150
[Classroom Games]	051 (100)	Lesson Plans	052	Standards	090
[Classroom Materials]	051 or 052	Letters (Correspondence)	030	State of the Art Reviews	070
Codes of Ethics	090	[Literature Guides]	131	• Statistical Data	110
Comics (Publications)	030	Literature Reviews	131 (070)	Student Publications	Document Dependent
Computer Output Microfilm	100	[Lobbying Papers]	090 and 120	Study Guides	051
Computer Programs	101	Magnetic Tape Cassettes	100	Surveys	160 or 143
[Concordances]	134	Magnetic Tapes	100	Tables (Data)	110
• Conference Papers	150	[Manuals]	050 or 051 or 052 or 055	Talking Books	100
• Conference Proceedings	021	Maps	133	Tape Recordings	100
[Conference Summaries]	021	Master Plans	090	[Taxonomy]	134
Contracts	090	[Master Tapes (Audio)]	100	Teaching Guides	062
Course Descriptions	052 or 050 or 051	• Masters Theses	042	[Technical Reports]	143
[Courtroom Transcripts]	090	Matrices	100	Test Reviews	142
[Creative Works]	030	Microforms	100	• Tests	160
Curriculum Guides	052 or 050 or 051	Models	100 or 143	Textbooks	010 and 051
I. Data Sheets]	110 or 130	[Multilingual Materials]	171	Thesauri	134
Diagrams	100	[Musica] Materials	030	• Theses	040
Dianes	120 (60 or 030)	Negotiation Agreements	090	[Transcripts (Interview)]	120
• Dictionaries	134	Newsletters	022	[Transcripts (Legal)]	090
[Dictionary Catalogs]	131	Newspapers	022	[Transcripts (Oral History)]	060
• Directories	132	Nonprint Media	100	Videodisc Recordings	100
[Discipline Codes]	090	Opinions	120	Videotape Recordings	100
Discographies	131	[Oral History Transcripts]	060	• Vocabulary	134
• Doctoral Dissertations	041	Pamphlets		Word Lists	134
Documentaries	100 (141)			Workbooks	051
Drama	030	[Parent Guides]	055	Worksheets	051
Editorials	120	Patents	090		
Encyclopedias	130	Periodicals	022	Yearbooks	141 (022)
[ERIC IAPS]	071	Permuted Indexes	130 or 131		
Essays	120 or 030				
[Evaluation Studies]	142				
Faculty Guidelines	056				
Faculty Handbooks	056				
Feasibility Studies	142				

FOOTNOTES: 1 All terms not in brackets have been selected from the ERIC Thesaurus
2 Conventions A or B — one or the other category is appropriate depending on item

2 Conventions A or B one or the other category is appropriate depending on item

A and B two categories are appropriate

A 1B¹ a second category might be appropriate depending on item

3 These terms like all other Descriptors identifying the form or type of a document should be used as major Descriptors only when they represent the subject of the document in hand.

**FIGURE VII-6: GUIDE FOR ASSIGNING PUBTYPE CODES (A CROSS-REFERENCE FROM
SPECIFIC KINDS OF DOCUMENTS TO MOST APPLICABLE PUBLICATION
TYPE CODE)**

(Bracketed terms are not Descriptors)

CODE	PUBLICATION/DOCUMENT TYPES
010	BOOKS
	COLLECTED WORKS
	—General
020	—Conference Proceedings (See also 150)
021	—Serials
030	CREATIVE WORKS (Literature, Drama, Fine Arts)
	DISSERTATIONS/THESES
040	—Undetermined
041	—Doctoral Dissertations
042	—Masters Theses
043	—Practicum Papers
	GUIDES
050	—General
	—Classroom Use
051	—For Learner (Instructional Materials)
052	—For Teacher (Teaching Guides)
055	—Non-Classroom Use (For Administrative and Support Staff, Teachers, Parents, Clergy, Researchers)
060	HISTORICAL MATERIALS
070	INFORMATION ANALYSES (Literature Reviews, State-Of-The-Art Papers)
071	—ERIC Information Analysis Products
080	JOURNAL ARTICLES
090	LEGAL/LEGISLATIVE/REGULATORY MATERIALS
100	AUDIOVISUAL/NON-PRINT MATERIALS
101	—Computer Programs (Actual programs, in any form, including code listings)
110	STATISTICAL DATA (Numerical/Quantitative)
120	VIEWPOINTS (Opinion Papers, Position Papers, Essays, etc.)
	REFERENCE MATERIALS
130	—General
131	—Bibliographies
132	—Directories/Catalogs
133	—Geographic Materials
134	—Vocabularies/Classifications/Dictionaries/Glossaries
	REPORTS
140	—General
141	—Descriptive (Program/Project Descriptions)
142	—Evaluative/Feasibility
143	—Research/Technical
150	SPEECHES, CONFERENCE PAPERS (Individual) (See also 021)
160	TESTS, EVALUATION INSTRUMENTS
170	TRANSLATIONS
171	—Multilingual/Bilingual Materials
999	OTHER/MISCELLANEOUS (Not Classifiable Elsewhere) (Avoid use of this category, if at all possible)

FIGURE VII-7: PUBLICATION/DOCUMENT TYPES

DESCRIPTORS CORRESPONDING TO PUBLICATION TYPE CATEGORIES	
DESCRIPTOR	PUBTYPE CODE
AUDIOVISUAL AIDS	100
BIBLIOGRAPHIES	131
BOOKS	010
COMPUTER SOFTWARE	101
CONFERENCE PAPERS	150
CONFERENCE PROCEEDINGS	021
DICTIONARIES	134
DIRECTORIES	132
DOCTORAL DISSERTATIONS	041
GUIDES	050
MASTERS THESES	042
MULTILINGUAL MATERIALS	171
PRACTICUM PAPERS	043
REFERENCE MATERIALS	130
REPORTS	140
RESEARCH REPORTS	143
SERIALS	022
SPEECHES	150
STATISTICAL DATA	110
TESTS	160
THESES	040
VOCABULARY	134

FIGURE VII-8: DESCRIPTORS CORRESPONDING TO PUBLICATION TYPE CATEGORIES

These highly specific terms (varied and often transient) usually are not appropriate for the *Thesaurus*. Nevertheless, they can be highly useful access points for the users and must be taken into account in the indexing process. The ERIC solution to this problem is to create a relatively "free" and open subject indexing field called the Identifier field.

Identifiers are not rigidly defined, structured, or controlled as are Descriptors; however, in order to avoid excessive scattering under different word forms, and to aid retrieval, certain standards are observed in their construction.

The *Identifier Authority List* should be consulted to determine the proper format for all existing Identifier concepts. The various categories of Identifiers and the rules for the construction of new Identifiers are covered in detail in Section VIII. The existing categories of Identifiers are:

- Conferences/Meetings;
- Curriculum Areas;
- Equipment
(including Computer Programs);
- Facilities;
- Geographic Locations;
- Groups (Ethnic);
- Groups (Occupations);
- Groups (Other);
- Health-Related Terms
(including Psychology);
- Historical/Special Events;
- Languages/Linguistics
- Laws/Legislation;
- Methods/Theories;
- Miscellaneous;
- Organizations;
- Personal Names;
- Projects/Programs;
- Science & Technology;
- Tests/Testing;
- Titles (Literature, Films, etc.)

In addition to specific entities, Identifiers may consist of more general concepts that have been introduced in the literature of the system but not yet added to the *Thesaurus*. Candidate Descriptors, awaiting approval for admission to the *Thesaurus*, are always "posted" in the ERIC system as Identifiers.

Selection of Identifiers should be made on the same basis as selection of Descriptors. The Identifier should be considered indexable information if the document contains significant and substantial enough information on the Identifier, as a subject, to justify later retrieval. To provide some examples:

- A document which reports on research that exploited Piaget's theory of concept formation is not actually concerned with the theory *per se*. However, the inclusion of PIAGETIAN THEORY as an Identifier would probably be justified because of the interest of researchers in isolating the various applications of the theory.

- A statistical study which happened to run its data through an IBM-360/40 computer should not be indexed by IBM SYSTEM 360 insofar as the type of computer is probably completely incidental to the results. The data could have been arrived at via any number of computers.
- A paper dealing with unemployment among female teachers in New England should be indexed by the geographic Identifier NEW ENGLAND. New England is not the main topic *per se*, but the area of the country inhabited by subjects of a study can be crucial to the meaning and usage of the document and the results reported.
- A history of the National Science Foundation (NSF) should be indexed by the Identifier NATIONAL SCIENCE FOUNDATION, even if the history is published by the NSF and it also appears as the institutional source. The former indexing indicates subject matter; the latter indicates the responsible preparing body. These are two different involvements.

All Identifiers appear in the Resume section of *Resources in Education* or in the Main Entry section of *Current Index to Journals in Education*, and those that are asterisked as Major terms appear in the printed subject indexes. There is no minimum requirement for Identifiers; no more than two (2) Identifiers should be designated as Major.

4. Translation and Negotiation (Indexable Concepts into Approved Terminology)

a. Use of an Exact Equivalent, Synonym, Broader Term, Narrower Term, or Two Terms Coordinated

The concepts which have been listed (in the author's or indexer's terminology) as candidates for Descriptors must be translated into the language of the *Thesaurus*. Each concept must be compared with terms in the *Thesaurus* to determine:

- whether an exact equivalent already exists;
- whether a synonym (or near synonym) already exists;
- whether a Broader Term in the *Thesaurus* is adequate for retrieval of the concept;
- whether two or more different existing terms in the *Thesaurus* can be coordinated for retrieval of the concept; or
- whether it is necessary to introduce a new term into the *Thesaurus* in order to cover the concept.

As the indexer attempts to locate applicable terms, the latest edition of the *Thesaurus* (Alphabetical Display) should be used, together with the monthly update sheets (showing new terms added that month) transmitted from the Facility since the last edition. The rotated and hierarchical permutations of the *Thesaurus* vocabulary, described in Section VII.H on "Indexing Tools," should be used as necessary, but not in lieu of the Alphabetical Display.

Application of the translation process can best be shown through the use of examples. Let us say that a document reports "*Research on the influences of various factors on the sex role development of 3-to-5-year old preschool children enrolled in a preschool program.*" Factors examined were:

- personal traits of the preschoolers (and of their brothers and sisters);
- the "only" child situation;
- intelligence;
- attitudes of parents;
- socioeconomic status;
- type of preschool program; and
- the influence of classmates.

A test to measure each child's intelligence was administered. Several sex role tests were also administered to each child, and two of these, the Draw-A-Person Test and the Toy Preference Test, were discussed in detail and partially reproduced in the document. Procedures surrounding administration of the tests are discussed.

Indexable concepts of the document described seem to be as follows:

PRESCHOOLERS	SOCIOECONOMIC STATUS
SEX ROLE	PRESCHOOL PROGRAMS
BROTHERS AND SISTERS	INTELLIGENCE
ONLY CHILD	SEX ROLE TESTS
INFLUENCE OF CLASSMATES	TEST ADMINISTRATION
ATTITUDES OF PARENTS	DRAW-A-PERSON TEST
PERSONAL TRAITS	TOY PREFERENCE TEST

Taking these terms one at a time:

- "Preschoolers" is listed in the *Thesaurus* with the instruction "Use PRESCHOOL CHILDREN." Look at the full display for that term. The Scope Note defines PRESCHOOL CHILDREN as "aged 2 through 5 years." PRESCHOOL CHILDREN can therefore be used to identify the population studied. In this case, USE A SYNONYM OR NEAR SYNONYM. (Still to be decided is whether this document requires both an age-level descriptor and an education-level descriptor.)
- "Sex Role" appears as a term in the *Thesaurus*, so here USE THE EXACT EQUIVALENT, SEX ROLE.
- "Brothers and Sisters" are two concepts which both appear in the *Thesaurus* with the instruction "Use SIBLINGS." Here again, USE A SYNONYM OR NEAR SYNONYM. There are no other appropriate terms in the display for SIBLINGS because they are either too narrow (TWINS) or not mentioned in the study (BIRTH ORDER).
- "Only Child" is not a *Thesaurus* term. Looking under "One Child Family," "Single Child," and "Single Child Family" meets with no success. Since there seems no way to express this concept with existing *Thesaurus* terms, USE IT AS AN IDENTIFIER. Keep a record of this term and the circumstances for its use, for it may become a candidate for a new *Thesaurus* term.
- "Classmates" is not a *Thesaurus* term. The term PEER INFLUENCE is listed in the Rotated Display under "Influence" or "Influences". This seems to get at the concept adequately, so USE A SYNONYM OR NEAR SYNONYM.
- "Attitudes of Parents" is not a *Thesaurus* term. A note under ATTITUDES in the *Thesaurus* recommends using a more specific term, if possible. PARENT ATTITUDES (found in the NTs) is the exact term needed. In this case, the BROADER TERM IN THE *THESAURUS* IS NOT ADEQUATE FOR RETRIEVAL, for although PARENTS and ATTITUDES could be post-coordinated, ATTITUDES could also be post-coordinated with any other population term such as SIBLINGS. Therefore, the precoordinated term PARENT ATTITUDES is preferable because it is more precise.
- "Personal Traits" does not appear in the *Thesaurus*, but PERSONALITY TRAITS does. The Scope Note seems to cover the concept expressed in the document. Look at INDIVIDUAL CHARACTERISTICS, which is mentioned in the Scope Note. INDIVIDUAL CHARACTERISTICS is scoped to include physical as well as psychological characteristics. PERSONALITY TRAITS is preferable because it is the more precise term. USE A SYNONYM OR NEAR SYNONYM in this case.

- "Socioeconomic Status" is another example of a concept with an EXACT EQUIVALENT in the *Thesaurus*.
- "Preschool Programs" is no longer a *Thesaurus* term, but is listed in the *Thesaurus* with the note "Use "PRESCHOOL EDUCATION." Since the children in the study are identified as being enrolled in a preschool program, which is in turn one of the factors studied, use the educational-level term PRESCHOOL EDUCATION in addition to the age-level term PRESCHOOL CHILDREN, which has already been selected to identify the subjects of the study.
- "Intelligence" is also a *Thesaurus* term. However, the terms INTELLIGENCE QUOTIENT and INTELLIGENCE TESTS are listed in the RT display, and the possibility exists that INTELLIGENCE is too broad. Since the document did not state that the test resulted in an intelligence quotient for each child, however, and since the test itself was not discussed in any detail, INTELLIGENCE, the BROADER TERM, IS PREFERABLE.
- "Sex Role Tests" is not a *Thesaurus* term, although SEX ROLE alone is a valid term. It is possible, then, that either TESTS and TESTING could be post-coordinated with SEX ROLE. All three terms could be used for these reasons: TESTS because the tests are discussed in some detail and portions are reproduced in the document; and TESTING because the next concept on our list is "Test Administration," which is cross-referenced "Use TESTING." Thus TWO OR MORE TERMS ALREADY IN THE *THESAURUS* CAN BE COORDINATED FOR RETRIEVAL. However, because TESTS and TESTING are very broad terms (of little value in manual indexes and prone to cause "false drops" in computer searching), the *Thesaurus* is checked further for an appropriate narrower term (NT). The hierarchies of both TESTS and TESTING show a variety of possibilities, but PSYCHOLOGICAL TESTING appears to be the most appropriate concept as it is scoped broadly and is "used for" PSYCHOLOGICAL TESTS. Thus, ONE PRECOORDINATED NARROWER TERM IS CHOSEN TO REPLACE THE TWO BROAD UNITERMS SELECTED ORIGINALLY.
- Since the "Draw-A-Person Test" and "Toy Preference Test" are featured in the document, these terms merit inclusion in the indexing. Since proper names are not *Thesaurus* terms, look in the *Identifier Authority List* to see if they are there to avoid creating variant forms of the names. DRAW A PERSON TEST is there (no hyphens allowed in the IAL); it can be used "as is." TOY PREFERENCE TEST is not there. Since its form meets the guidelines for new Identifiers, create a new Identifier. Both of these test names are thus indexed as Identifiers.

b. Use of a New Descriptor/Identifier

All new indexing terms, neither found in the *Thesaurus* nor the *Identifier Authority List*, should be posted as Identifiers. Procedures for the construction of Identifiers are included in Section VIII, Part 2 of this Manual. All Identifiers are reviewed for proper format by the ERIC Facility lexicographic staff prior to release to the ERIC master files. Any Identifier accumulating significant postings, especially a general conceptual-type term, should be considered for Descriptor status and inclusion in the *Thesaurus*.

If the indexer has arrived at the decision that a new Descriptor will be recommended, it is necessary to:

- research the term;
- locate authorities that can be cited as to its meaning and use;
- develop a definition or Scope Note;
- detect synonyms in whose place the new term will be used;
- place the term somewhere in the hierarchy of existing terms, identifying some terms as Broader (higher in the generic tree), some terms as Narrower (lower in the generic tree), and some as Related (on adjacent branches).

The resultant recommendation is transmitted to the ERIC Facility Lexicographer who provides lexicographic coordination and analysis via the system-wide Vocabulary Review Group (VRG). Candidate Descriptors should be posted as Identifiers until the VRG evaluation has been completed and final dispositions are announced. New Descriptor coordination procedures are fully described in Section VIII, Part 1 (items D, E, and F) of this Manual.

5. Special Issues

a. Indexing Specificity

A fundamental principle of coordinate indexing is to index at the level of specificity of the document in hand. This principle has been referred to earlier; however, enough problems arise in the implementation to warrant a separate discussion.

For purposes of illustration, let us look at the indexes to two issues of *Resources in Education* (1967, #7 and #8). (The examples have been selected for purposes of illustration; there may have been at the time legitimate reasons for these choices of Descriptors.)

1967, #7 - Under BIBLIOGRAPHIES, note a number of "annotated bibliographies" that were not indexed under the specific Descriptor ANNOTATED BIBLIOGRAPHIES.

1967, #8 - Under EVALUATION, note a document dealing with "program evaluation."

1967, #8 - Under FACILITIES, note a document dealing with "educational facilities."

In all these cases, documents were indexed at a higher or more generic level than the document discussed. Users should be able to rely on the reasonable expectation that *all* documents dealing with a specific subject (e.g., EDUCATIONAL FACILITIES) can be found under that term and not be forced to look under some other term. There are at least three particular situations when an indexer must consider this question of generality/specificity especially carefully. These are:

1. When a document discusses a concept at *both* a general and specific level; e.g., a document describing objective tests generally, and multiple choice tests specifically, in about equal detail.
2. When a document discusses a specific (species) concept, but the indexer thinks the document adds useful information to the body of knowledge about the general (genus) concept.
3. When a document discusses many specifics of a general (genus) concept, but none in sufficient detail to merit the indexing of each specific concept.

With reference to (1) above, an indexer might consider, for example, both broader and narrower Descriptors (i.e., OBJECTIVE TESTS and MULTIPLE CHOICE TESTS) as indexable concepts. If there is a sufficient amount of information worth indexing (always a matter of judgment) about both general and specific concepts, then they are both indexed.

In the case of (2) above, the indexer may index at the general level, even if the general concept is not discussed *per se*. For example, a very extensive description, study, or review of the well-known Wechsler Adult Intelligence Scale (WAIS) should be indexed by INTELLIGENCE TESTS, as well as by an Identifier. If the ERIC system covered only the literature of educational tests and measurement, this guideline might not be given. However, since ERIC's users are likely to be interested in the whole area of tests at varying levels of specificity, this document should be made accessible at a "reasonably" general level (i.e., INTELLIGENCE TESTS, not TESTS) and at the level of the specific test name as well. This guideline requires expertise, knowledge of the system's users, and mature judgment. Further subject specificity may be provided as necessary by Identifiers, but Identifiers should not be used *in lieu of* the most specific available Descriptor.

The third area (3) above, is perhaps the most troublesome. The indexer must develop a "feel" for what is sufficient or reasonable information about a concept that makes it "indexable." Experience in reviewing search results, as well as in indexing, can be helpful in this area. Some examples may illustrate this problem.

• Example 1:

Document ED 010 856 indexes AGRICULTURAL PERSONNEL. As the abstract indicates, the population of participants included:

- extension personnel;
- agricultural teachers;
- home economics teachers;
- forestry personnel;
- professional employees in agribusiness.

In the judgment of the indexer, there was insufficient data about the various groups to merit indexing each specific occupational group. The groups, however, were part of the class "agricultural personnel," and that concept only was indexed. (Parenthetically, it is noted that EXTENSION AGENTS was also indexed, perhaps reflecting the particular Clearinghouse's special interest in that concept.)

• Example 2:

In describing the population of its study, a document lists in tables their:

- age;
- sex;
- educational level;
- participation rate of conference attendance.

The indexer must decide whether the information provided is significant enough to index specifically. Since none of the above factors were variables in the study, the indexer decided to index the group of concepts at the generic level PARTICIPANT CHARACTERISTICS.

• Example 3:

A document entitled *Guidelines for the Referral of Children Who Are Suspected or Known to be Exceptional* describes and defines in detail the:

- crippled and health impaired;
- hearing impaired and deaf;
- blind and partially seeing;
- emotionally disturbed;
- socially maladjusted;
- slow learners;
- mentally retarded;
- multiply handicapped;
- gifted.

Because of the amount of detail provided for each category, the indexer decides that this document should be retrievable through the generic concepts EXCEPTIONAL PERSONS and DISABILITIES, as well as through each specific area of exceptionality mentioned above.

● Example 4:

A program guide entitled the *La Grange Area Department of Special Education Handbook* describes a sizable, reputable program which includes education of the:

- mentally retarded;
- physically handicapped;
- socially maladjusted;
- emotionally disturbed.

However, nearly all guides for "Special Education" programs include and describe each of these areas. The information on each area of exceptionality is usually similar throughout these guides. Their inclusion in such a guide is implicit and need not be indexed. In contrast to the previous example, the areas of exceptionality covered are not indexable information. The document should be indexed by the concepts PROGRAM GUIDES and SPECIAL EDUCATION, and terms representing its grade level and origin (school district).

b. Major/Minor Index Terms

(1) General

The ERIC indexer is required to identify the "Major" and most important concepts contained in a document by immediately preceding the equivalent term or terms selected with an asterisk (*). The rule is that at least one (1) and not more than five (5) Descriptors (six if only one major Identifier is used) may be designated as Major. Only two (2) Identifiers may be designated as Major. All index terms not preceded by an asterisk are automatically considered "Minor" for that document. Any index term may be Major or Minor, depending on the document.

The purpose of this arrangement is to:

- identify the chief or major concepts in the document, thereby providing the reader of RIE or CIJE with additional information and help in the search and evaluation of relevant references on a particular subject.
- provide at least one subject route to the document in the RIE/CIJE printed subject indexes, but not so many as to make the indexes excessively large.
- provide searchers of the data base the capability of designing either broad, exhaustive searches that aim at comprehensive recall of all references on a subject, or narrower, targeted searches that aim at selective retrieval of some (but perhaps not all) references highly relevant to the subject.

As with the Generic/Specific guidelines, sufficient problems arise in the implementation of the Major/Minor guidelines to warrant additional discussion and examples.

(2) Utility of Terms for the Printed Indexes

Problems occur in this area when the Major terms that emerge are excessively focused, thereby providing insufficient access routes. The ERIC indexer must be aware that the results of the indexing function are used by both manual and computer searchers. This does not mean, however, that the indexer should forget the fundamental rule to "Index to the specific level of subject matter covered by the document." Rather, it means that the indexer, taking full advantage of the *Thesaurus* must consider and provide legitimate access points for both groups.

Especially for manual searchers (who cannot search on second or third words appearing in a given Descriptor), the major Descriptors assigned should provide as many valid access routes as possible under the circumstances. An example can help make this point. Assume the major terms assigned to a document were: *COLLEGE CURRICULUM; *COLLEGE INSTRUCTION; *COLLEGE SCIENCE; *COLLEGE STUDENTS. The indexer, in reviewing such work, should clearly look for legitimate ways to introduce more "spread" in the indexing. Not only is it likely that more specific terms are appropriate, but without them the manual user would be at a disadvantage by being limited in retrieval to solely the "College" part of the printed index.

A second type of problem occurs when the major terms assigned are so specialized that all by themselves in the printed indexes they excessively restrict user access points (i.e., the users simply wouldn't think to look under them in many cases). Given a document on heterogeneous and homogeneous

grouping within the instructional process, not only would the very specific Descriptors HETEROGENEOUS GROUPING and HOMOGENEOUS GROUPING be appropriate, but so would the most specific "instruction" term—in this case GROUP INSTRUCTION. If only the very specialized terms were used, access would be unnecessarily limited and the manual user would be at a disadvantage.

It is important for a specialized Clearinghouse (or any specialist for that matter) not to confuse their own viewpoint and interests with those of all other users. It is prudent, therefore, during the indexing process, to step back at least once and consider the problem of access to a given document by all of its potential users. Again, the rule of indexing to the specific level of subject matter dealt with by the document must be observed. The guidance here merely suggests that legitimate variegated access routes to a document not be ignored.

(3) Excessively Broad Terms

Excessively broad terms (e.g., DEVELOPMENT), which lack discrimination, and which if used without restraint might collect large numbers of postings in a single journal issue, should also be avoided as Majors, just as they should generally be avoided in the indexing process as a whole. Examples of very broad Descriptors that should be used very selectively and only in situations really calling for them are displayed in Figure VII-9.

(4) Terms Not Representing Subject Matter

Terms that represent population concepts, educational level, age level, methodology, and document type characteristics can be thought of as not representing the subject matter of the document, at least in the same sense that a clear subject matter term like GEOLOGY does.

Since the applicability of these non-subject terms to a document is generally a yes-no proposition and not a matter of degree, the question arises as to how to handle major-minor indicators vis-a-vis these terms.

Such Descriptors should be made minor in cases where they do no more than identify the intended education level, age level, population, research methodology, type of document, etc. However, such Descriptors *may* be made Major when they are the topic of significant discussion in the document. In such situations these terms become, in effect, subject terms and should be handled the same way as subject terms, i.e., if the document contains substantial discussion *about* the concept then the term representing that concept should be made Major no matter what type of term it is.

ABILITY	GUIDANCE	PUBLICATIONS
ACHIEVEMENT	GUIDES	RELATIONSHIP
ACTIVITIES	IMPROVEMENT	REPORTS
ATTITUDES	INFLUENCES	RESEARCH
BACKGROUND	INSTITUTIONS	RESOURCES
BEHAVIOR	INSTRUCTION	RESPONSIBILITY
CHANGE	LANGUAGE	SCHOOLS
COUNSELING	LANGUAGES	SCIENCES
COURSES	LEARNING	SELECTION
CULTURE	MEASURES (INDIVIDUALS)	SERVICES
CURRICULUM	METHODS	SKILLS
DATA	NEEDS	STANDARDS
DESIGN	OBJECTIVES	STATUS
DEVELOPMENT	OCCUPATIONS	STUDENTS
EDUCATION	ORGANIZATION	STUDY
EMPLOYMENT	PARTICIPATION	TEACHERS
ENVIRONMENT	PERFORMANCE	TESTING
EQUIPMENT	PERSONNEL	TESTS
EVALUATION	PLANNING	THEORIES
FACILITIES	PROBLEMS	THERAPY
GROUPS	PROGRAMS	TRAINING

FIGURE VII-9: BROAD DESCRIPTORS

In order to clarify this point a number of examples follow:

- Educational Level

A catalog of math concepts and skills for fifth grade math would use GRADE 5 as a major Descriptor and INTERMEDIATE GRADES as a minor Descriptor (the latter indicating mandatory educational level). However, a review of textbooks to determine what math concepts are usually taught in grades 4, 5, or 6 might have INTERMEDIATE GRADES as a major Descriptor (indicating subject content).

- Population or Age Level

A report of a study that used disadvantaged black teenagers (ages 14-16), but that did not discuss the significance of their being black or teenagers would use BLACK YOUTH and ADOLESCENTS as minor Descriptors (indicating population and age level). However, a study entitled *The Career Planning Frustrations of Black Teenagers* would probably have the same Descriptors as major (indicating significant subject content).

- Methodology

A report of a research study that made use of matched groups and even included some discussion of the appropriateness of such a technique might use MATCHED GROUPS as a minor Descriptor. On the other hand, a paper on the futility of setting up matched group research designs for a particular type of research should use MATCHED GROUPS as a major Descriptor (representing major subject content).

- Document Characteristics/Publication Type

A curriculum package that contains a teacher's guide and student workbook, among other materials, would use WORKBOOKS as a minor Descriptor (representing document characteristics/type). A description of a curriculum development project which designed and field tested a workbook should use WORKBOOKS as a major Descriptor.

An automechanics curriculum guide containing behavioral objectives, suggested activities, and evaluation questions keyed to the objectives might have CURRICULUM GUIDES, BEHAVIORAL OBJECTIVES, LEARNING ACTIVITIES, and CRITERION REFERENCED TESTS as minor Descriptors (document characteristics/publication type). A teacher's manual with instruction in how to design curriculum guides or how to develop and evaluate behavioral objectives would have CURRICULUM GUIDES or BEHAVIORAL OBJECTIVES as major Descriptors (representing major subject content).

c. Capitalization of Index Terms

The ERIC data base is an upper and lower case file and all index terms must be entered into the ERIC records in correct upper and lower case form.

The *Identifier Authority List* (IAL) is printed in upper and lower case and presents no problem in this regard. All the indexer has to do is use the form as printed in the IAL. The indexer will find that the initial letters of every Identifier word, usually excepting certain conjunctions, articles, and prepositions, are in upper case in the IAL.

The ERIC *Thesaurus "Working Copy"* is currently printed in all upper case version *only* and therefore the indexer must remember to convert all Descriptors to initial capital letters only.

Articles, conjunctions, and prepositions are never capitalized in Descriptors unless they are the first word. There are, however, certain Identifiers where articles, conjunctions, and prepositions are appropriately capitalized, e.g., book titles such as "Graduate (The)." Some examples appear in Figure VII-10.

d. Punctuation of Index Terms

Punctuation of Descriptors and Identifiers is kept to a bare minimum because the special characters used in punctuation can later create severe matching problems in the retrieval process. The only punctuation marks permitted as part of index terms are left and right parentheses (as used to enclose a qualifier). *Hyphens, dashes, apostrophes, quotation marks, periods, commas, and all other such special characters, are invalid in the Descriptor and Identifier fields.*

Semicolons are used as subfield delimiters, separating one index term from another, but are not valid as part of an index term.

e. Over-Indexing and Under-Indexing

One of the most prevalent indexing faults is the assignment of too many or too few index terms. These two faults tend to be mutually exclusive. The indexer that over-indexes generally does not also under-index, and vice-versa.

Over-indexing is generally the result of laziness and the failure to take the time to decide what is truly indexable information and what is merely mentioned in passing. It takes less time to over-index than to index with discrimination.

		DESCRIPTORS		IDENTIFIERS	
ARTICLES/ CONJUNCTIONS/ PREPOSITIONS		USUAL USAGE (LC) (EXAMPLE)	EXCEPTION (UC) (EXAMPLE)	USUAL USAGE (LC) (EXAMPLE)	EXCEPTION (UC) (EXAMPLE)
A	Postsecondary Education as a Field of Study	None		To Kill a Mockingbird	A Better Chance Inc
AN	None	None		To an Athlete Dying Young	---
AND	Food and Drug Inspectors	None		Crime and Punishment	And Searching Mind*
AS	Postsecondary Education as a Field of Study	None		Maryland Self Concept as a Learner Scale	As You Like It
BY	Management by Objectives	None		Baghdad by the Bay*	By Love Possessed*
FOR	English for Special Purposes	None		Fund for Adult Education	For Whom the Bell Tolls*
IN	Reduction in Force	In State Students		Catcher in the Rye	In Cold Blood
OF	Leaves of Absence	None		Epic of Gilgamesh	Of This Time of That Place
ON	State Committees on Education (UF)	On Campus Students On the Job Training		Soul on Ice	On the Origin of Species
PER	Expenditure per Student	None	---		Per Capita*
THE	State of the Art Reviews	None		College of the Sea (England)	Graduate (The)
TO	Adjustment (to Environment)	None		Pathways to Identity Project	To Kill a Mockingbird

*Not currently an Identifier.

FIGURE VII-10: CAPITALIZATION OF ARTICLES/CONJUNCTIONS/PREPOSITIONS IN DESCRIPTORS AND IDENTIFIERS

Under-indexing is generally the result of failure to put oneself in the shoes of the searcher or end user. An under-indexed item is generally either tagged with a few broad terms behind which the document is effectively lost, or it is tagged with a few specialized terms the indexer is grateful to find in the title or abstract.

It is not easy by precept alone to cure these two indexing ailments. Occasionally over-indexing is caused by the inclusion of several terms all beginning with the same lead-in word, e.g., Parent Education; Parent Participation; Parent Conferences. The indexer, abrogating the responsibility to choose the "best" term to represent a given conceptual area, takes the scattergun approach and throws in all the possibilities. Occasionally over-indexing can be attributed to an imbalance between the size of the document (i.e., small) and the number of index terms (i.e., many). The indexer, forgetting the user, proceeds on a lock-step course and zealously squeezes every concept out of a five-page paper even though many terms may be represented by less than a page of text. No user will thank such an indexer.

6. Indexing Review

After the indexer has completed all the basic tasks involved in indexing, i.e.:

- examination of the document;
- identification of indexable concepts;
- translation of selected concepts into *Thesaurus* terminology;
- tagging of major concepts/terms;
- recommendations for new terms—completion of *Vocabulary Development Form* (see Section VIII);
- recording of final terms on *Resume Form* (see Section V), etc.

the finished product should receive a final review. This review may be accomplished by the indexer or by a Supervisor/Reviewer. The following questions should be asked about the work:

1. Do the designated Major terms represent the emphasis of the document?
2. Are the major terms reflected (at least conceptually or by equivalent terms) in the Abstract or Title, so that there may be no question in the user's mind about their relevance?
3. Are the possibilities for "False Drops" minimal?

4. Are all significant and important concepts in the document covered by Descriptors (or Identifiers)?
5. Can the index terms be fitted together in narrative form to provide an accurate idea of the subject matter of the document?
6. Has excessive "clustering" of terms beginning with the same word been avoided?
7. Do the Major terms provide a class description that could be expected to occur spontaneously to a user, or are they too specialized and obscure?
8. If the scope of the document overlaps with other Clearinghouses, have their viewpoints been taken into account (e.g., via examination of their scope of interest statement and "most frequently used Descriptors" list)?

See also the "Summary of Significant Rules" appearing at the beginning of this Section.

7. Recording Indexing on Resume Form

The rules for transcribing onto the Resume Form all Descriptors and Identifiers finally selected to index a document, and for identifying them as Major or Minor, are provided in the "Cataloging" Section of this Manual (Section V).



PROCESSING MANUAL

**Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network**

SECTION 8: VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 1) — DESCRIPTORS

November 1981

EDUCATIONAL RESOURCES INFORMATION CENTER

**National Institute of Education
U.S. Department of Education**

SECTION VIII:
VOCABULARY DEVELOPMENT AND MAINTENANCE
(PART I)—DESCRIPTORS

VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 1)—DESCRIPTORS

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VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 1)—DESCRIPTORS

SUMMARY OF SIGNIFICANT RULES

1. ERIC's indexing vocabulary provides standard, controlled, subject-concept entries for use in printed indexes and computer-manipulatable files. Entries must represent concepts found in actual documents/articles processed by the system. Control is necessitated by variability found in the language of documents and the language of system users.
2. ERIC's indexing vocabulary consists of Descriptors and Identifiers. Descriptors are meaningful terms or short phrases that, for the most part, represent general classes of things found in the literature. Multiword Descriptors are used whenever single-word Descriptors cannot adequately describe concepts in the literature. Descriptors (singly, or two or more in coordination) will usually adequately represent the ideas and concepts found in a document/article. To identify specific entities (such as pieces of equipment, geographic areas, and other proper nouns and noun phrases), however, Identifiers must be used. Identifiers add a depth to indexing that is not always possible with Descriptors alone. Identifier indexing is intended to supplement Descriptor indexing and is, therefore, to be done in addition to (rather than in lieu of) Descriptor use. Descriptors are defined, interrelated by a system of cross-references, and alphabetically displayed in the *Thesaurus of ERIC Descriptors*. Identifiers are alphabetically displayed in the *Identifier Authority List* (IAL), which serves as a companion volume or supplement to the *Thesaurus*.
3. The *Thesaurus of ERIC Descriptors* is a list of several thousand formally controlled terms. Many terms in the *Thesaurus* refer from non-preferred forms to preferred terminology. Descriptors represent the preferred (i.e., indexable) entries. Non-preferred terms (i.e., USE references) are either: (1) synonyms and other variant word forms; or, (2) concepts that are seldom used in the literature covered by ERIC and that can be searched equally well under a broader entry.
4. The *Thesaurus* is displayed in four sequences: Alphabetical Display (primary arrangement); Rotated Display; Hierarchical Display; and Descriptor Group Display. Only the full entries in the Alphabetical Display should be used for direct indexing (or searching). The abbreviated entries in the three secondary displays serve as indexes, in effect, to the Alphabetical Display.
5. Not all Identifiers are proper nouns. Any term or phrase new to the literature will, as a rule, first be "tried out" as an Identifier before it gains Descriptor status. This practice allows a concept to be monitored while information about its usage and/or acceptance among various authors is accumulated. Frequency of indexing occurrence is an important consideration in deciding whether to add a new conceptual-type term to the *Thesaurus*.

6. Indexers have the responsibility of recommending changes to the *Thesaurus* when they find subject concepts in the literature that cannot be expressed or indexed adequately with the existing terminology. Each Clearinghouse must assume a proportional share of vocabulary activities, if a balance across subject areas represented in the vocabulary is to be maintained. As a general "rule of thumb," concepts should be considered candidate Descriptors after 5 usages as Identifiers, and should be included somewhere in the structured *Thesaurus* vocabulary (either as preferred or as non-preferred terms) after approximately 10 usages. Excluded from this rule are, of course, those Identifiers representing proper nouns that cannot qualify for Descriptor status.
7. The Vocabulary Development Form is the input form to be used for all *Thesaurus* transactions, whether adding a term, deleting a term, or modifying an existing term's display. The form permits entry or change of all cross-references, including Used For (non-preferred) terms (UF), Narrower Terms (NT), Broader Terms (BT), and Related Terms (RT). It also accommodates input or revisions of Scope Notes and Group Codes. Full justification must be provided on the Vocabulary Development Form for each *Thesaurus* transaction. Authorities must always be cited for new Descriptors, or for redefined or merged existing Descriptors. A minimum of three authorities must be cited for each definitional Scope Note prepared. Care should be taken to avoid parochial points of view. Compromise may be necessary when the terminology needs of separate areas of specialization are in conflict.
8. Assignment of a Group Code refers to the placement of a particular Descriptor in one, and only one, of 41 Descriptor Groups (broad subject categories that provide a *Thesaurus* overview). Scope Notes are brief statements of intended usage, for the purpose of either restriction or explanation; they should not be construed as formal definitions, but as indicators of how terms are (or should be) used in indexing. Instructional notations frequently are part of Scope Notes. These notations direct the *Thesaurus* user to other terms, indicate proper coordination, provide historical notes on changes in usage or cross-reference structure, or otherwise guide and explain preferred usage for both indexing and searching. Because of the inherent "softness" or imprecision of educational terminology, ERIC carries Scope Notes on all Descriptors whose meanings or intended usages are not self-evident.
9. A significant tenet of the ERIC vocabulary development process is the practice of keeping the authority files and the index (postings) files synchronous, i.e.,
 - As a new term is added to the authority files, a special effort is made to locate uses of the term and its variants in the data base and to update its postings accordingly.
 - When an obsolete or ambiguous term is removed from the authority files, every effort is made to also delete the term from the postings files.
 - Some changes require manual reindexing (i.e., individual examination and reindexing of original records). Ambiguous terms whose prior usages cannot be conveniently re-examined, may be made invalid.

10. *Thesaurus* cross-references are subject to the following basic rules:
 - The NT-BT relationship is one of class membership. An NT must be entirely a member of a class defined by its BT. Called hierarchical, the NT-BT relationship provides the capability for fine-tuning indexing and searching processes to the most appropriate (i.e., specific) level of subject matter.
 - Close conceptual relationships among Descriptors not in the same hierarchy are displayed via the RT cross-reference.
 - All cross-references are reciprocal, i.e., for every entry, a corresponding complementary entry must appear elsewhere. That is, for every UF entry, there is a USE reference; for every NT, there is a BT; for every BT, there is an NT; for every RT, there is another RT. It is not necessary for the preparer of a Vocabulary Development Form to generate cross-reference reciprocals, as this is done automatically by the *Thesaurus* software.
11. The principal mechanics of Descriptor construction are as follows:
 - Abbreviations and acronyms should generally be avoided as Descriptors; they may be treated as non-indexable USE references.
 - Maximum length of Descriptors and USE references is 50 characters, including blanks (i.e., spaces between words).
 - Noun forms are preferred to verb forms (e.g., PUBLICITY, not PUBLICIZE).
 - The plural form is used for "count nouns" (e.g., APTITUDE TESTS), about which one may ask "how many?"
 - The singular form is used for "mass nouns" (e.g., AUDIENCE PARTICIPATION), about which one may ask "how much?"
 - Descriptors and USE references judged to be homographs must have parenthetical qualifiers (e.g., CASE (GRAMMAR)).
 - Sex neutral Descriptors are preferred when a concept is intended to refer to both sexes (e.g., SEAFARERS, not SEAMEN). Sexist terminology that commonly appears in the literature may be entered as USE references.
 - Descriptors may consist of alphabetic characters, Arabic numerals, left and right parentheses, and blanks. Other characters are not acceptable.
 - Inverted entries (e.g., PLANNING (FACILITY)) should be avoided. The Rotated (i.e., permuted) Display obviates the need for inverted entries.
12. The Vocabulary Development Program provides a system-wide participatory mechanism for coordinating and implementing changes to the ERIC *Thesaurus*. Through the Vocabulary Review Group, ERIC Clearinghouses and selected users are given the opportunity to review all proposed changes and additions prior to final review/implementation by the Facility.

VIII. VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 1)—DESCRIPTORS

A. Introduction

A vocabulary for information retrieval provides standard, controlled, subject-concept entries for use in printed indexes and computer manipulatable files. Without vocabulary control, concepts become scattered under many variant entry forms, with a consequent loss in system utility.

The *Thesaurus of ERIC Descriptors* is the principal indexing vocabulary used in the ERIC system and is the basis for most of the subject entries in the ERIC data base. The *Thesaurus* is a list of several thousand cross-referenced, single-word and multiword concepts representing the subjects found in the data base. Many terms in the *Thesaurus* refer from non-preferred forms to preferred terminology. Preferred entries in the *Thesaurus* are labeled "Descriptors." Non-preferred terms are either: (1) synonyms and other variant word forms, or (2) concepts that are seldom used in the literature covered by ERIC and that can be searched equally well under a broader entry.

Subject entries in ERIC's indexes and computer files that are not Descriptors are based on a companion volume to the *Thesaurus*, the *Identifier Authority List* (IAL). Identifiers are usually names of specific entities (i.e., proper names) and serve as indexing adjuncts to Descriptors; they may also represent subjects that have only recently been introduced to the ERIC data base and, as yet, have not been accepted as *Thesaurus* terms.

The field of education covers most areas of knowledge. The list of conceivable subjects covered by writers in the field, and the variety of ways those writers use to express the same subject, would be troublesomely long and overlapping without some term-use restrictions. The *Thesaurus* and IAL specify such restrictions for ERIC.

Section VIII of the *ERIC Processing Manual* covers these two publications and the development and maintenance of their terminology, in separate discussions: Part 1—Descriptors; Part 2—Identifiers.

1. Thesaurus—Definition and Function

The word "thesaurus" comes from the Greek word for treasure or treasury. Roget's famous thesaurus is a treasury of sorts. It gives a writer a choice of many alternative words with subtle shadings of meaning to express single concepts. On the other hand, a thesaurus developed for information retrieval purposes might be looked at more as a treasure map, leading a user to a treasury of stored information. A preferred term is selected among several possible terms, and users are directed by means of references from alternative forms, to employ this one term.

An information retrieval thesaurus is, therefore, a term-association list structured to enable indexers and subject analysts to describe the subject content of a document to a desired level of specificity at input, and to permit searchers to describe in precise terms the information required at output. A thesaurus serves as an authority list of the filing labels that permit information to be stored by one person and retrieved by another. It is a device to bring into coincidence the language of the documents and the language of indexers and inquirers.

The thesaurus concept has been widely adopted for vocabulary control in modern post-coordinate information systems. It is similar in structure and organization to the conventional list of "subject headings." It lists Descriptors alphabetically, endeavors to control synonyms and homographs, and displays generic-specific and other relationships between terms.

A thesaurus of Descriptors, interrelated by cross-references, provides the basic rules of communication for an information system. As an information system grows, its thesaurus can be systematically built and refined to the point where it represents, in a sense, the vocabulary of the subject field involved. A functional thesaurus must be logical and accurate and have an internal integrity in relation to the guidelines upon which it has been built. The ultimate success or failure of a thesaurus depends, however, on the extent of its usefulness as a communication tool in an information system.

2. Descriptors—Definition and Function

Descriptors are meaningful terms or short phrases that are used to characterize a document and to provide index entries to it. Descriptors, for the most part, represent general classes of things discussed in the literature. Many will be found in the general authoritative dictionaries, while the remainder can usually be located in one or more specialized dictionaries. Descriptors are the basic building blocks that, when defined and interrelated by a system of cross-references, comprise an information retrieval thesaurus.

Descriptors perform a dual function: (1) they permit an indexer to describe the subject elements of a document so that it (or a surrogate record) may be stored in a system for future search and retrieval purposes; (2) they permit a searcher to construct a question using terms that are known to have been used in indexing. In both instances, the extreme variability of the language found in documents and the language used by inquirers is reduced by reliance on a standard vocabulary. In this sense, the Descriptors represent the communication link between the operators and users of the system and its content. Descriptors are closely related (but not identical) to both the "subject headings" that one finds in conventional library systems and the

"keywords" that one finds in full-text or uncontrolled vocabulary situations.

Descriptors (singly, or two or more in coordination) will usually adequately represent the ideas and concepts found in a document. To identify specific entities (such as pieces of equipment or geographic areas), however, Identifiers must be used. Rules and guidelines for Identifiers are covered by Section VIII (Part 2).

3. Educational Terminology

Many of the problems encountered in the development of the ERIC *Thesaurus* directly reflect problems inherent in the relatively "soft" or imprecise language of education and the social sciences. The subject matter of the physical sciences and engineering, in contrast, lends itself much more readily to close definition, and commonly accepted language and word usage.

In most indexing schemes, the basic objective is to break down common language or terminology into its simplest components while still retaining adequate definition. This objective is often reflected in a thesaurus or word list comprised mostly of single-word terms. In the ERIC *Thesaurus*, however, there is an abundance of compound (multiword) terms. This fact can be explained in terms of the educational process itself. This process basically involves students, teachers, and an educational environment. The events occurring during the educational process can often be applicable equally to any of the three components. In an indexing system that relies on the coordinative use of several terms to represent complex topics, it is difficult to distinguish the source of an action and the recipient of an action without separately defining each. For example, if there is a document dealing with "the influence of the teacher on the attitudes of students," it is theoretically possible to index such a document by coordinating the concepts of "influences," "attitudes," "teachers," and "students." In retrieval, however, how are searchers to know whether they are retrieving documents that deal with "student attitudes" or "teacher attitudes," or, for that matter, with "student influences" or "teacher influences"? To avoid confusion, these concepts can be distinguished by indexing the document in question by the multiword terms "student attitudes" and "teacher influence." In an environment as complex as that of the educational process, this type of compounding, binding, or "precoordination" of terms is often unavoidable.

Beyond the considerations of logic and retrievability, however, there is also the question of how people actually think and express themselves in the language of a subject field. In the interest of clarity, unity, meaningfulness, and recognizability, a thesaurus must represent and preserve the natural language of its field. For better or worse, much of the language of education consists of compound terminology.

The ERIC *Thesaurus* is widely recognized in the United States as the most current, definitive vocabulary tool in the domestic education field. It is gradually being recognized as an international authority, also; its terms and Scope Notes (i.e., definitions) are used in such authorities as the *UNESCO:IBE Education Thesaurus* and the *International Dictionary of Education*.

B. Lexicography as Practiced in the ERIC System

1. General

ERIC is a decentralized network, and the development and maintenance of the ERIC *Thesaurus* is a decentralized operation. The real "architects" of the *Thesaurus* are the Clearinghouse indexers engaged in the day-to-day processing of documents for input. Indexers have the responsibility of recommending changes to the *Thesaurus* when they find subject concepts in the literature that cannot be expressed or indexed adequately with the existing terminology.

ERIC indexers, like the network they support, are decentralized. As Clearinghouse staff members, their indexing is primarily confined to documents in the subject specialty area covered by their particular Clearinghouse, and represents the terminology of that specialty area and the viewpoints of its practitioners and users. Part of the strength of the ERIC *Thesaurus* is its reflection of the specialist's point of view. (Of course, each Clearinghouse must assume a proportional share of vocabulary activities if a balance across subject areas is to be maintained.)

The subject specialist's interpretation of terminology, however, must frequently be moderated. Education encompasses wide-ranging subject fields, and ERIC is responsible to a highly diversified user community. Frequently, one Clearinghouse's interpretation of subject matter will not coincide with that of another. ERIC avoids the trap of parochial points of view by providing centralized lexicographic analysis and control, an ongoing function of the ERIC Processing and Reference Facility.

2. Principal Lexicographic Functions

All ERIC vocabulary recommendations (whether new terms or modifications, *Thesaurus*-related or Identifier-related) are reviewed by the Facility lexicographic staff. Terms, definitions, and cross-reference structures are analyzed and evaluated to make sure they:

- Maintain Consistency
- Avoid Proliferation
- Clarify Ambiguities
- Conform to the Vocabulary Coordination Procedures
Set Forth in the *ERIC Processing Manual*

Each of these functions is important enough to be explained with some examples.

a. Maintain Consistency

Clearinghouses working independently can generate inconsistent terminology. For example, the concepts "academic" and "scholastic," although varying slightly in meaning can be considered synonymous for purposes of retrieval. The use of both concepts in the *Thesaurus* would create a problem of inconsistency.

Example: Clearinghouse A submits SCHOLASTIC FAILURE
UF ACADEMIC FAILURE

Clearinghouse B submits ACADEMIC APTITUDE
UF SCHOLASTIC POTENTIAL

Clearinghouse C submits ACADEMIC ACHIEVEMENT
UF SCHOLASTIC ACHIEVEMENT

Clearinghouse D submits SCHOLASTIC ABILITY
UF ACADEMIC ABILITY

(UF = "Used For..."—See item C.2.e of this section.)

Problem: Even though the compound terms involved are not exact synonyms, if they all went into the *Thesaurus* as submitted, consistency would obviously be lacking and retrieval would be more difficult. Users would be puzzled by what they would assume to be a distinction made by the system between "academic" and "scholastic." This problem cannot be solved at the level of the Clearinghouses, as one Clearinghouse is often not aware of another's term preferences and choices.

Solution: Central lexicography receives the recommendations from the A, B, C, and D Clearinghouses. Since all the information has been assembled at one point, the problem can be recognized. The four candidate terms are analyzed to see whether they can reasonably coexist in the same system. This analysis may be aided by consulting reference works. It obviously must first be determined whether the two terms "academic" and "scholastic" are synonyms and, if so, which is preferred. In this particular case, the conclusion was that the terms are synonymous for purposes of retrieval, and that "academic" is more widely used than "scholastic." Most often, such a decision establishes a precedent that will then apply to later decisions and that in the observance will lend consistency to the system's vocabulary.

b. Avoid Proliferation

Decentralized input can also lead to a proliferation of redundant and essentially duplicate concepts, with subsequent loss of retrieval effectiveness. To avoid such situations, synonymous or unnecessary variants must be stored under selected "preferred" terms.

Example: Clearinghouse A submits BICULTURAL EDUCATION

Clearinghouse B submits INTERCULTURAL EDUCATION

Clearinghouse C submits MULTICULTURAL EDUCATION

Clearinghouse D submits MULTIETHNIC EDUCATION

Problem: Without central control, all of the terms in the example might well enter the *Thesaurus*, leading to four terms where one would do. Searchers conducting inquiries in this topical area would then be burdened unnecessarily with the task of incorporating all four terms into their strategies because any other approach might fail to retrieve essential material.

Solution: Central lexicographic control can solve this problem via research, rational decision-making based on findings, and the recording of this process for use in later problem situations. In this case, MULTICULTURAL EDUCATION was selected as the preferred form and cross-references were made to it from the other three terms.

c. Clarify Ambiguities

Specialists in one field may be unaware that their terminology may have different meanings in other fields.

Example: Clearinghouse A submits LEARNING CENTERS

Clearinghouse A's field of specialization covers the education of young children and understands LEARNING CENTERS to be an "open education" term meaning "areas inside classrooms (e.g., a table) in which instructional materials have been gathered for unstructured, self-directed learning." It can be assumed that this is a common term in Clearinghouse A's field and that they see no ambiguity in it. With the "binders" of the specialist on, Clearinghouse A has unwittingly submitted a homograph.

Problem: LEARNING CENTERS may appear to present no problems to the indexers and searchers in Clearinghouse A's field of specialization. Imagine, however, the many uses and interpretations that could be applied to such a term across other areas of knowledge. The term could be misinterpreted to mean many different kinds of facilities and institutions, including schools, counseling centers, libraries, psychoeducational clinics, job training centers, etc. Before too long, the term might be used in so many different ways that it could no longer be searched specifically for the originally intended "classroom" context. Users, particularly in Clearinghouse A's field, would be faced with many "false drops," and wasted searches might be repeated in one way or another by hundreds of users.

Solution: Potential ambiguity of terminology can be readily detected from the broad, unrestricted point of view of central lexicography. Once the need for Scope Notes is discerned, contact can be made with initiating Clearinghouses to request that definitions be prepared. In this case, a parenthetical qualifier was also needed to assure correct usage. The resultant entry in the *Thesaurus*, LEARNING CENTERS (CLASSROOM) with its restrictive Scope Note, is unambiguous.

d. Conform to the Vocabulary Coordination Procedures Set Forth in the ERIC Processing Manual

With the assistance of a number of lexicographic consultants and terminological specialists over the years, a set of formal vocabulary rules has evolved for ERIC Descriptors and Identifiers. All rules for Descriptors are set forth in this section of the *ERIC Processing Manual*, Section VIII (Part 1), and all rules for Identifiers are documented in Section VIII (Part 2).

These rules cover the policy and the mechanics of both vocabulary generation and selection. For instance, an important policy is that "Descriptors should represent important concepts found in the literature of the data base rather than concepts derived independently." Matters of Descriptor/Identifier mechanics covered are, for example: noun forms preferred over verb forms, inverted entries avoided, no punctuation other than parentheses, use of parentheses limited to qualifying homographs or indicating "life spans" of formerly indexable concepts.

The rules are designed to impose order and internal integrity on the ERIC vocabulary and are to be observed both by the personnel submitting candidate terminology and by the central lexicographic staff evaluating the submissions.

Not all situations can be covered, however, in any single set of rules. (The *ERIC Processing Manual* is analogous in this regard to a constitution rather than to a set of statutes.) Vocabulary and other processing rules must leave the way open for compromise action when requirements are in conflict. ERIC Lexicographers and Clearinghouse personnel work together in interpreting the rules in order to achieve the overall objectives of the system.

3. Total Network Involvement in *Thesaurus* Development

ERIC's comprehensive Vocabulary Improvement Project (VIP) from 1977 to 1980 (see item C.1.h of this section) introduced a new methodology for thesaurus development and maintenance activities within a decentralized system. Prior to the VIP, changes to the ERIC *Thesaurus* (particularly with respect to individual terms) were based essentially on negotiations between a submitting Clearinghouse and the central lexicographic staff. The VIP, through its interactive "Play Thesaurus," extended the negotiation process to all Clearinghouses.

In the VIP, decisions negotiated between a submitting Clearinghouse and the Lexicographers were recorded in a "Play Thesaurus" (PT) for other Clearinghouses to see. All Clearinghouses could then review these decisions and use the PT for communicating their opinions and other comments. The Lexicographers, conducting additional negotiation as necessary, would then use these remarks in finalizing a term, its Scope Note, and/or display for the "real" *Thesaurus* file.

This system of total participation worked so well that it was continued when the VIP was completed. A new "Vocabulary Development Program" was initiated in December 1980 in which all *Thesaurus* recommendations are reviewed by representatives from every Clearinghouse, and from several user organizations, before final dispositions are made. Although the new program requires some additional turnaround time to determine dispositions, this appears to be fully justified considering the additional lexicographic perspectives gained across Clearinghouse subject areas and between indexers and users. (For a complete discussion of the new Vocabulary Development Program, see item "F" of this section.)

4. Participation by External Users

ERIC encourages direct participation by external users in its vocabulary development activities. Users have been involved in the development of the ERIC *Thesaurus* since its beginning, i.e., reviewing terminology and serving in advisory roles when major changes in *Thesaurus* coverage and format were being considered.

Users are kept abreast of current vocabulary activities through Clearinghouse newsletters and the ERIC Facility's *Interchange* publication. They frequently interact directly with vocabulary coordinators at the Clearinghouses. Another common occurrence is for users to submit vocabulary recommendations directly to the Facility Lexicographer and to interact with the lexicographic staff over the phone.

Volunteers from the user community currently serve in the review group of the new Vocabulary Development Program. The 1977-80 VIP project was another example of user involvement (10,000 out of 60,000 returned review forms, or 17%, were completed by users).

5. Synchronization of Lexicography and Indexing

A significant philosophical tenet of the ERIC vocabulary development process is the practice of keeping the authority files and the index (postings) files synchronous. (See the "Vocabulary Development Form" and its emphasis on postings, Figure VIII-1-5 in item "E.") As a new term is added to the authority files, a special effort is taken to locate uses of the term and its variants in the data base and to update its postings accordingly. When an obsolete or ambiguous term is removed from the authority files, every effort is made to also delete the term from the postings files. Some such changes require manual reindexing (i.e., individual examination and reindexing of original records), but most can be accomplished using ERIC's "Transfer-and-Delete" software (in which one transaction suffices to locate all records containing one to several terms, to delete the term or terms, and to replace them with one or more terms, while retaining the original major or minor status of the terms intact).

6. Lexicographic Authorities

The ERIC Facility maintains an extensive collection of lexicographic tools (dictionaries, glossaries, thesauri, encyclopedias, etc.) used to verify, structure, and define terms used in the ERIC vocabulary. Over 300 key references are included in the collection. A list of the principal thesauri and subject heading lists in this collection appears in item D.5.c of this section.

The documents in the lexicographic collection are listed in the "Thesaurus Bibliography." The bibliography is maintained by, and may be obtained from, the Facility. It has appeared in past editions of the published *Thesaurus* and may be made available once again in future editions, if warranted by user demand.

Additional reference works in Washington metropolitan area libraries are consulted when complex lexicographic problems arise that cannot be researched adequately using the reference materials at hand.

C. Thesaurus of ERIC Descriptors

1. Background

a. Beginnings—The Panel on Educational Terminology

In 1965, an advisory group was formed to consult with Central ERIC staff on the development of a thesaurus of educational terminology. This small 6-person group, called the Panel on Educational Terminology (PET), consisted of both educators and information experts from both inside and outside the Federal Government. Early meetings also involved observers from various subject matter areas. The PET group guided the development of the ERIC *Thesaurus* through its first 8 years (1965-72).

b. The "Disadvantaged Collection"

The ERIC *Thesaurus* grew originally from a "free indexing" core of 2,300 terms, produced in 1965 as a result of an ESEA Title I project called Operation Fingertip in which over 1,700 documents on the teaching of disadvantaged children were indexed. (See ED 070 485, *Catalog of Selected Documents on the Disadvantaged: Subject Index*.) These initial terms were structured by ERIC staff using a set of preliminary guidelines developed by the PET group. The terms were then reviewed by a volunteer group of librarians, information specialists, and educators. An interim or "Phase I" Thesaurus based on this review was first made available to ERIC indexers in June 1966.

c. "Rules for Thesaurus Preparation"

Concurrently with the indexing of the "Disadvantaged Collection," the PET group began preparing a formal set of rules or conventions to govern vocabulary expansion beyond the initial core of terms. An initial investigation was made of other thesaurus developmental efforts (such as those conducted by the Engineers Joint Council and the Department of Defense's Project LEX). PET decided that the rules and conventions appropriate for the physical sciences and engineering were not entirely suitable for the social sciences and for the field of education. As a result, a modified set of rules regarded as appropriate for ERIC began to take shape. First published in October 1966, these rules were entitled "Rules for Thesaurus Preparation."

The rules contained instructions on proper Descriptor construction, format, and content. Special emphasis was placed on the convention that Descriptors must represent concepts found in the literature and must be actually used in the ERIC data base. Earlier work at Central ERIC had indicated that the expression of educational concepts is frequently not possible by the use of uniterms (single-word terms). The rules indicated that multiword Descriptors should be used when false coordinations are otherwise probable, when single words combined in searching mean something different than intended, and when single-word terms have excessively high postings. The rules were completed in time for use with the initial indexing for the first issue of RIE, published in November 1966. CIJE appeared about 2 years later, in January 1969.

The 1966 "Rules for Thesaurus Preparation" represent the foundation of the ERIC vocabulary rules followed today. A second (and last) edition of these rules was published in September 1969 (see ED 033 740).

d. Vocabulary Expansion (Period of Significant Growth)

The emphasis during the early years was on expanding the ERIC vocabulary beyond the initial core list of terms. New Descriptors were added on the basis of their need in indexing the documents going into the system. When an ERIC indexer determined the need for a new Descriptor, he/she would prepare the appropriate justification with authority citations and definitions, and submit such justification to the Facility Lexicographer. (These same basic practices are in effect today.)

The increase of new Descriptors was rapid during the early years of the ERIC system. A plateau was reached in 1971 with about 7,300 terms, including 4,900 postable main terms. The ensuing 8 years through 1979 brought an average of about 100 new terms per year to the *Thesaurus*. Not until 1980 and the implementation of the results of the comprehensive Vocabulary Improvement Project (VIP) was this trend substantially altered.

e. Thoughts of Backtracking

As the *Thesaurus* continued to grow, it gradually became apparent that some early decisions were not wholly satisfactory. Problems such as nearly synonymous Descriptors, ambiguity among terms, and discrepancies among generic (hierarchical) relationships began to surface.

The first talk of possibly merging nearly synonymous Descriptors occurred in 1969, but the idea was rejected for the time-being because of the great expense thought to be involved.

By the time DIALOG was commercially operational for computer searching in early 1972, the PET group had decided it was time to shift attention away from *Thesaurus* expansion to an evaluation of educational terminology from the users' point of view. Before any activity could get underway, however, the PET group disbanded, primarily because its chairperson and ERIC's original Lexicographer, Dr. James Eller, left the ERIC system.

f. Vocabulary Improvement Program

Before the end of 1972, the ERIC Facility submitted a proposal for the establishment of a nationwide Vocabulary Improvement Program. The program got underway in the fall of 1973 with the development of the "Transfer-and-Delete" software system, and the establishment of the Vocabulary Review Group and the *Thesaurus* Advisory Panel.

The new "Transfer-and-Delete" system allowed one transaction to be written that would both delete a term and simultaneously transfer all of its postings to another term. Such a capability permitted the master files for RIE and CIJE to remain compatible with a substantially modified *Thesaurus*. Vocabulary Review Group members were selected so as to achieve a broad base of coordination. Representatives or "vocabulary coordinators" were included from the ERIC Clearinghouses, and well as from various university libraries and State Education Departments having access to the ERIC data base and experience in its use. Recommended changes to the *Thesaurus* were accepted from all network staff and external users. Such recommendations were recorded on the *Term Change Notice* (TCN) Form and distributed to the review group members for their reactions. The *Thesaurus* Advisory Panel (TAP) was set up as a locally (Washington) based group, consisting of membership from Central ERIC, the ERIC Facility, and several other members within and outside the ERIC network. The group's purpose was to replace the disbanded, policy-making PET group and to resolve those relatively few issues of *Thesaurus* change for which a consensus of review group members could not be achieved.

Never designed as a centralized, intensive clean-up effort, the original Vocabulary Improvement Program was effective in meeting its objectives. During the 1973-78 time frame, 50 TCNs were evaluated by the review group, resulting in the deletion and reposting of 87 unwanted Descriptors. In its meetings, the TAP approved several innovations. (e.g., two-way hierarchical display, add/entry dates, multiple "Use" references) that ultimately became integral parts of the *Thesaurus*. However, the program was somewhat cumbersome with its complicated paperwork flow and documentation requirements. In April 1976, an ERIC indexing seminar (held in Annapolis, Maryland, as part of that year's National Technical Meeting) helped to solidify the feeling that it would take far too long to accomplish a thorough thesaural clean-up with the existing program. Following up in November 1976, Central

ERIC funded a small study project for Jim Houston, the Facility Lexicographer, to investigate ways in which comprehensive vocabulary improvement might be accomplished in a reasonable time frame.

g. Shifting into a Higher Gear

Three information systems known to have engaged in vocabulary revitalization efforts (NTIS, the Engineering Index, and the Chemical Abstracts Service) were surveyed by the Facility with the hope that their experience would prove useful in planning a new vocabulary effort for ERIC. In fact, however, ERIC proved to be breaking new ground in planning and accomplishing its vocabulary improvement. The survey report concluded that the best people to turn to for real vocabulary revitalization would be the actual users of the ERIC *Thesaurus*, i.e., the indexers in the ERIC Clearinghouses and the searchers within ERIC's community of users. A plan was presented to Central ERIC on how to elicit this participation.

Utilizing this basic groundwork, Central ERIC selected a "Coordinator" to organize a new, more intensive project in which a thorough *Thesaurus* clean-up could be realized in a relatively short period of time. The newly proposed effort was called the Vocabulary Improvement Project or the VIP. Its first Coordinator was Barbara Booth of the ERIC Clearinghouse for Junior Colleges. Central ERIC selected Lynn Barnett, ERIC Clearinghouse on Higher Education, to coordinate the project when Ms. Booth left the ERIC system in mid-1979.

h. Vocabulary Improvement Project (VIP)

The new VIP was inaugurated in September 1977 with a national meeting of Clearinghouse vocabulary coordinators and selected users involved in the original Vocabulary Review Group. At that meeting, an Executive Committee was selected consisting of the VIP Coordinator, the Central ERIC Monitor, the Facility Lexicographer, and two vocabulary coordinators from the Clearinghouses. This overall coordination meeting was followed quickly by three more vocabulary coordinators' meetings, held in conjunction with regional technical meetings, where the actual procedures of the new project were worked out.

(1) Phase I: "Thesaurus Review"

The first phase of the project was labeled "Thesaurus Review." The goal was to permit as many individuals as possible to critically evaluate each *Thesaurus Descriptor* and its accompanying display. A "Descriptor Review Form" was developed by the VIP Executive Committee, and Clearinghouses participated in preparing a form for each Descriptor and its display—about 5,200 originals. (See Figure VIII-1-1 for an example of this form complete with a reviewer's comments.) Each Clearinghouse received a complete set of forms from the Facility in March 1978. Sixteen user organizations also received some of the forms (or all of them, in some cases). By August, over 60,000 Descriptor evaluations had been completed, about 10,000 by the external users.

All forms were returned to the Facility where they were collated into a complete set for each Descriptor. The Executive Committee then sorted the forms again for Clearinghouse assignment (based on "scope of interest"), and the Facility arranged their distribution. Each Clearinghouse and the Facility received approximately 300 Descriptor assignments. Clearinghouses then determined priorities and arranged their schedules in order to complete their assignments. The axiom "usage determines meaning" was the overriding guideline for Phase II.

(2) Phase II: "Production"

Phase II or the "Production" phase extended from November 1978 to September 1979, during which time Clearinghouse personnel (using the completed "Descriptor Review Forms") wrote and rewrote scope notes, merged synonymous terms, updated obsolete terminology, and revised cross-references. All suggestions were recorded on a special Thesaurus input form prepared by the Executive Committee (see Figure VIII-1-2), sent to and reviewed by the Facility lexicographic staff, then keyed into a special Thesaurus file affectionately called the *Play Thesaurus* (PT). Each suggestion in the PT identified the originator by Clearinghouse/Facility prefix and was coded "approved/disapproved" by the Lexicographers. The PT was updated twelve times over a 14-month period. Each issue was distributed to all participants, who could then react to the suggestions of others, or to lexicographic decisions, via a special "Comment" field. Each "Comment" was also identified by Clearinghouse/Facility prefix and arranged chronologically so that a continuing dialog was provided throughout the twelve PT issues. Nearly 11,000 transactions had been entered into the PT file when the last issue was published shortly after New Year's Day 1980. The Executive Committee met during the

descriptor review form

ERIC PROCESSING &
REFERENCE FACILITY

Clearinghouse/Organization



VOCABULARY IMPROVEMENT PROJECT

ZJH
Reviewer5-1-78
Date

POSTINGS/USAGES																																																			
Total	Major	Minor	RIE	CIJE	1966-1970	1971-1974	1975																																												
942	463	479	171	771	126	558	258																																												
descriptor display being reviewed Group S10																																																			
<table border="1"> <thead> <tr> <th>RATINGS (Main Term and Scope Note)</th> <th>1 High</th> <th>2</th> <th>3</th> <th>4</th> <th>5 Low</th> <th>6 Don't Know</th> </tr> </thead> <tbody> <tr> <td>Interest in term</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>X</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Usefulness</td> <td><input type="checkbox"/></td> <td>X</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Clarity of Meaning</td> <td>Precise</td> <td><input type="checkbox"/></td> <td>X</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Ambiguous</td> </tr> <tr> <td>Acceptability of form</td> <td>Preferred</td> <td>X</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Nonpreferred</td> </tr> <tr> <td>Distinctness</td> <td>Discrete</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>X</td> <td><input type="checkbox"/></td> <td>Synonymous</td> </tr> </tbody> </table>										RATINGS (Main Term and Scope Note)	1 High	2	3	4	5 Low	6 Don't Know	Interest in term	<input type="checkbox"/>	<input checked="" type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Usefulness	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Clarity of Meaning	Precise	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	Ambiguous	Acceptability of form	Preferred	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nonpreferred	Distinctness	Discrete	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	Synonymous
RATINGS (Main Term and Scope Note)	1 High	2	3	4	5 Low	6 Don't Know																																													
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Specific changes (suggested by action items checked below) may be indicated directly on the display to the left, when appropriate.																																																			
ACTION REQUIRED—MAIN TERM/SCOPE NOTE/GROUP CODE (optional)																																																			
<input type="checkbox"/> Add/revise Scope Note <u>See comment below</u> <input type="checkbox"/> Change Group Code to _____ <input type="checkbox"/> Homograph, divide and/or qualify _____ <input checked="" type="checkbox"/> Retain, but merge near-synonym(s) <u>Laboratory Techniques</u> <input type="checkbox"/> Delete, transfer to new term _____ <input type="checkbox"/> Delete, merge with existing term _____ (ISYN) (BT) (RT) <input type="checkbox"/> Delete, transfer to Identifier field _____ <input type="checkbox"/> Delete (only) _____ <input type="checkbox"/> Other (specify below) _____																																																			
ACTION REQUIRED—DISPLAY (Optional)																																																			
<input type="checkbox"/> Add/delete/NT(s) <u>Add "Methods"</u> <input checked="" type="checkbox"/> Add/delete/BT(s) <u>Delete "Teaching Procedures"</u> <input checked="" type="checkbox"/> Add/delete/RT(s) <u>see display</u> <input type="checkbox"/> Add/delete/UF(s) _____ <input type="checkbox"/> Other (specify below) _____																																																			

ADDITIONAL COMMENTS (e.g., special meanings within sub-disciplines, relationships with other terms). Continue on back if necessary:

little difference between the ways "lab procedures" & "lab techniques" are used in indexing. Recommend deleting latter term. With a merge, above Scope Note should be changed to something very general or deleted entirely.

Form No. EFF-54 (12/77)

FIGURE VIII-1-1: "DESCRIPTOR REVIEW FORM"
OF THE VOCABULARY IMPROVEMENT PROJECT (VIP)

FRONT

VOCABULARY IMPROVEMENT PROJECT
descriptor justification and data input form

ERIC

A. ADD:

B. DELETES:

C. CHANGES:

D. PURPOSE:

E. ALLOWS:

1. Main Term (50 Character Limit)
 TERM:

2. Subterm (20 Character Limit)
 SUBTERM:

3. Synonyms
 BT:

4. Antonyms
 AT:

5. Examples
 EX:

6. Related Terms
 RT:

7. Used for (e.g. Synonyms)
 UP:

8. Alternate Terms
 ATY:

F. Existing New Term

G. Modifying an Existing Term

ENTER IF MODIFIED TERM IS SAME AS NEW TERM
 MAX 100 CHARACTERS OVER OR ONE OF THESE

H. Group Code

I. Information

A. Version & Date

B. Supplementary Address & Date

C. Additional Notes

J. Codes

1. Authorised Used (input to ODS/ODS)

2. Definitions prepared

3. Search terms prepared

4. DVD/CD entries prepared

5. Personal Impact (in percentage, frequency, etc.)

6. Other (please specify)

K. CUV:

MAX 110 CHARACTERS

BACK

VOCABULARY IMPROVEMENT PROJECT
descriptor justification and data input form

ERIC

O. Authorised Used (input to ODS/ODS)

P. Definitions prepared

Q. Search terms prepared

R. DVD/CD entries prepared

S. Personal Impact (in percentage, frequency, etc.)

T. Other (please specify)

G. CUV:

MAX 110 CHARACTERS

FIGURE VIII-1-2: "PLAY THESAURUS" INPUT FORM
 OF THE VOCABULARY IMPROVEMENT PROJECT (VIP)

week of January 14-18, 1980 in Washington, D.C., to close out the PT phase of the VIP. Over 500 terms that had not received final resolution in the PT were reviewed by the Committee, and final dispositions were made.

Nearly 7,000 suggestions from the "production" phase were designated as "approved." These were keyed directly from the PT to the "real" *Thesaurus* file. The working copies of the "new" *Thesaurus* were ready in March 1980 for use in indexing; the published version followed in June 1980. A summary of the major VIP transactions follows:

1,437 Scope Notes Written
512 New Main Terms Added
841 Main Terms Converted to "USE" Terms
123 Terms Invalidated (i.e., kept on the file, but no longer used)
18 Terms Purged
563 New "USE" Terms Added
716 "USE" Terms Deleted

The RIE and CIJE master files and the inverted postings were updated to reflect all of these changes—this involved more than 2 million transactions to individual records in the data base. Updated magnetic tapes were sent to the online vendors in September 1980.

The Vocabulary Improvement Project was a major event in the history of ERIC and in the information/library science field. Such an undertaking by a major information system was virtually unprecedented. The ERIC *Thesaurus* was completely revised to reflect contemporary indexing needs, while the integrity of the ERIC data base was preserved for the searcher through massive updating, and both were done within a period of 3 years.

i. Present Status and Future Directions

In May 1980, Patricia Coulter (Central ERIC Monitor of the VIP), Lynn Barnett (VIP Coordinator), Jim Houston (Facility Lexicographer), and Carolyn Weller (Identifier Coordinator) met to determine how to use the experience gained during the comprehensive Vocabulary Improvement Project for the future development and control of the ERIC *Thesaurus*. Through their deliberations, a new program was outlined having the overall purposes of increasing efficiency, reducing costs, and more thoroughly involving the Clearinghouses and users in the *Thesaurus* activities of the 1980's. In order to represent a new beginning, the new program was called

the "Vocabulary Development Program." With the blessing of Central ERIC, and after a review by Clearinghouse staff members involved in vocabulary work, the new program became operational in December 1980.

The functions, work flow, and documentation procedures of the new "Vocabulary Development Program" are discussed in item "F" of this section.

2. Rules and Conventions for Descriptors

a. General

The rules and conventions that follow have been designed to help ERIC indexers and lexicographers make consistent decisions relating to the addition and modification of terms in the *Thesaurus of ERIC Descriptors*. They are based on two earlier ERIC publications:

- ED 033 740—*Rules for Thesaurus Preparation*, 2nd edition. September 1969. Prepared by the Panel on Educational Terminology (PET), U.S. Office of Education.
- ED 188 621—*VTD Manual: Guidelines and Procedures for ERIC Vocabulary Development*. December 1978. Prepared by Barbara Booth, first coordinator of the 1977-80 ERIC Vocabulary Improvement Project (VIP).

Rules for Descriptor selection and construction are covered below under "Main Terms." This is followed by detailed discussions of each of the parts of main term displays, including "Descriptor Group" codes, "Scope Notes" or term definitions, and cross-references. Cross-references include Used For/USE References, Broader/Narrower Terms, and Related Terms.

These rules must be adhered to in the completion of the Vocabulary Development Form (see item "E" of this section). The rules follow the standards of practice advocated by the *American National Standard Guidelines for Thesaurus Structure, Construction, and Use* (ANSI Z39.19-1974).

b. Main Terms

(1) General

The concepts "main term" and "Descriptor" are equivalent when used in the sense of controlled thesaurus vocabularies. Main terms are the preferred, postable terms in a thesaurus; they are used to index and search (i.e., describe and retrieve), in a consistent manner, the subject content of documents entered in an information system.

Any information retrieval thesaurus will also contain "non-preferred" synonyms or quasi-synonyms, included to provide alternative pathways to the main terms or Descriptors. In ERIC, these are referred to as "USE references."

The following discussion focuses on the selection and construction of ERIC "Descriptors." See item C.2.e of this section for details on "USE references."

(2) Descriptor Selection

A Descriptor is any single or multiword term that appears in the *Thesaurus* and that may be used for indexing a document or journal article. Rules for selecting Descriptors are as follows:

(a) Appearance in Literature

Descriptors should represent important concepts actually found in the literature of the data base (as contrasted with concepts arrived at theoretically, independent of the literature). They should also reflect the actual language used in the literature to express such concepts.

(b) Acceptability to ERIC Users

Descriptors selected should have an agreed-upon meaning and should be acceptable terminology for relevant user groups. The judgment of acceptability will involve decisions as to obsolescence, negative connotations, colloquialness, and other factors.

Acceptability must be considered in terms of the wide-ranging scope of education and its highly diversified user community. Care should be taken to avoid parochial points of view. Compromise may be necessary when the terminology needs of separate areas of specialization are in conflict. (See also rule "f" under "Descriptor Construction" below.)

(c) Usage Frequency

Frequency of occurrence is a factor in establishing Descriptors. Records should therefore be kept of the number of times candidate terms have been used in indexing and/or searching.

NOTE: As a general rule of thumb, concepts should be considered candidate Descriptors after 5 usages as Identifiers and should be included

somewhere in the structured *Thesaurus* vocabulary (either as Main or USE terms) after approximately 10 usages. Excluded from this rule are, of course, those Identifiers representing very specific entities that cannot qualify for Descriptor status (e.g., names of organizations, projects, people, specific equipment, geographic locations, etc.).

(d) Multiword Descriptors

Multiword Descriptors (bound terms, pre-coordinated terms, and others) should be used whenever single-word Descriptors cannot describe concepts adequately. Many problems of this type can be solved by the careful application of rule "a" above. The following points should be considered:

- Use of a multiword Descriptor is justified if any of the individual words in the multiword Descriptor could combine with other Descriptors so as to produce frequent false coordinations.

Example: STUDENTS
TEACHERS
ATTITUDES
STUDENT ATTITUDES
TEACHER ATTITUDES

- Use of a multiword Descriptor is justified if the individual words of that multiword term are also unique Descriptors that, when coordinated with each other, would retrieve concepts different from that retrieved by the multiword term.

Example: STUDENTS
TEACHERS
STUDENT TEACHERS

- If a single-word term is so general as to be virtually useless in manual searching (e.g., SCHOOLS), consider linking that term with another term (e.g., SECONDARY SCHOOLS).
- See also rule "g" under "Descriptor Construction" below.

(3) Descriptor Construction

(a) Word Form

Descriptors are limited to nouns and noun phrases; however, these include nouns derived from verbs and adjectives.

DISADVANTAGED	(from adjective)
DROPOUTS	(from verb + adverb)
PROBLEM SOLVING	(from verb + object)
STUDENT EVALUATION OF TEACHER PERFORMANCE	(noun phrase)

(b) Singular vs. Plural

In choosing between singular and plural noun forms, the precedents of the ERIC *Thesaurus* (based on long-established rules of major indexing and subject cataloging operations) should be followed:

- The plural form should be used for "count nouns"—things or entities about which one should ask "how many?," e.g.,

COMPUTERS	SKILLS
OCCUPATIONS	STUDENTS
PROGRAMS	VISUAL IMPAIRMENTS

- The singular form should be used for "mass nouns"—nouns about which one should ask "how much?" This includes those nouns derived from verbs and adjectives that represent processes, attributes or properties, and conditions, e.g.,

ABILITY	EVALUATION
ACHIEVEMENT	LEADERSHIP
BACKGROUND	REGIONAL PLANNING
DELINQUENCY	TIME

- Common usage should be followed for term types not covered by these general rules, e.g.,

DEMOCRACY not DEMOCRACIES

(c) Length

Descriptors are limited to 50 characters, including blanks.

(d) Character Limitations

Allowable characters are limited to the letters A-Z, the Arabic numerals 0-9, and parentheses () .

(e) Letters First

A Descriptor should not begin with a numeral, e.g.,

GRADE 4 not 4th GRADE

(f) Parenthetical Qualifiers

Parentheses may be used for two purposes, i.e.,

• Homographs

If a Descriptor is judged to be a homograph, it must have a parenthetical qualifier, e.g., DEPRESSION (PSYCHOLOGY), DEPRESSION (ECONOMICS).

The parenthetical qualifier is considered an integral part of the Descriptor, and both homograph and qualifier are used together in indexing and searching.

For any given homograph, there may exist as many Descriptors consisting of homograph plus parenthetical qualifier as there are unique indexable meanings for that homograph.

Caution: Do not use another homograph as a parenthetical qualifier, e.g.,

GRADES (SCHOLASTIC) not GRADES (MARKS)

• Invalid Descriptors

Invalid Descriptors ("dead" terms) are qualified with notations indicating their "life span," e.g., LABORATORY TECHNIQUES (1967 1980), SECURITY (1967 1978).

Life span qualifiers are integral parts of invalid Descriptors, and their presence precludes further indexing use of such Descriptors.

(See discussion on "Former Main Terms" below,
item "(5)".)

(g) Natural Word Order

Multiword Descriptors should reflect direct,
natural word order, as found in the literature.

ADULT EDUCATION not EDUCATION OF ADULTS
FREEDOM OF SPEECH not SPEECH (FREEDOM OF)

Do not use inverted entries.

BEHAVIORAL OBJECTIVES not OBJECTIVES, BEHAVIORAL

One of the reasons for restricting the use of
parenthetical qualifiers to homographs and invalid
Descriptors is to preclude the use of inverted
entries. All words in the *Thesaurus*, whatever
their position in the Descriptor, are accessible
through the Rotated Display, thereby making inverted
entries unnecessary. (See item C.3.b.)

(h) Abbreviations and Acronyms

Abbreviations and acronyms are inherently ambiguous
and should generally be avoided as Descriptors.
Exceptions to this rule are acronyms that have replaced
their spelled-out versions in common discourse, either
nearly (e.g., FLES) or totally (e.g., LASERS). Most
acronyms that appear in the *Thesaurus* are non-indexable
USE references (e.g., ETV, Use EDUCATIONAL TELEVISION).

(i) Sex Neutral Terminology

Sex neutral Descriptors are preferred when a
concept is intended to refer to both sexes, e.g.,

CRAFT WORKERS	not	CRAFTSMEN
ENLISTED PERSONNEL	not	ENLISTED MEN
HOMEMAKERS	not	HOUSEWIVES
LAY PEOPLE	not	LAYMEN
LABOR NEEDS	not	MANPOWER NEEDS
SEAFARERS	not	SEAMEN
NEEDLEWORKERS	not	SEAMSTRESSES

Preference of sex neutral language does not
preclude the creation of legitimate population terms
such as EMPLOYED WOMEN, FATHERS, WOMEN FACULTY, etc.
Terminology of this nature is necessary when such
specific population groups are the frequent subjects
of documents.

(4) Descriptor Format

(a) Structure (Alphabetical Display)

The structure of a typical Descriptor in the main Alphabetical Display (Working Copy) is illustrated in Figure VIII-1-3.

(b) Capitalization

Although Figure VIII-1-3 shows upper and lower case letters, the *Thesaurus* file is actually in all upper case, and the *Thesaurus* Working Copy used by ERIC indexers appears in all upper case. Indexers are required to transcribe terms in their Working Copies to the upper/lower case format of RIE/CIJE records—initial capital letters for all words, excluding prepositions, articles, and conjunctions when they are not the first word (e.g., Reduction in Force, In State Students).

The published *Thesaurus* editions appear in upper/lower case; these are programmatic conversions of the all upper case master file.

(c) Alphabetization

Alphabetization of the *Thesaurus* Working Copy is word-by-word according to the following sequence:

Left Parenthesis;
Letters in Usual Order;
Numerals in Usual Order.

Word-by-word ordering of the Working Copy (corresponding to the subject indexes of RIE and CIJE) began in 1980, as a conversion from letter-by-letter alphabetization. A similar conversion is planned for the commercially published editions of the *Thesaurus*.

(d) Group Codes

The 3-digit Group Code is used to place a particular Descriptor in one of 41 Descriptor Groups. These groups are broad subject categories that provide an overview of the *Thesaurus* vocabulary. They can be used for general browsing or for searching. For more information, see item C.2.c of this section.

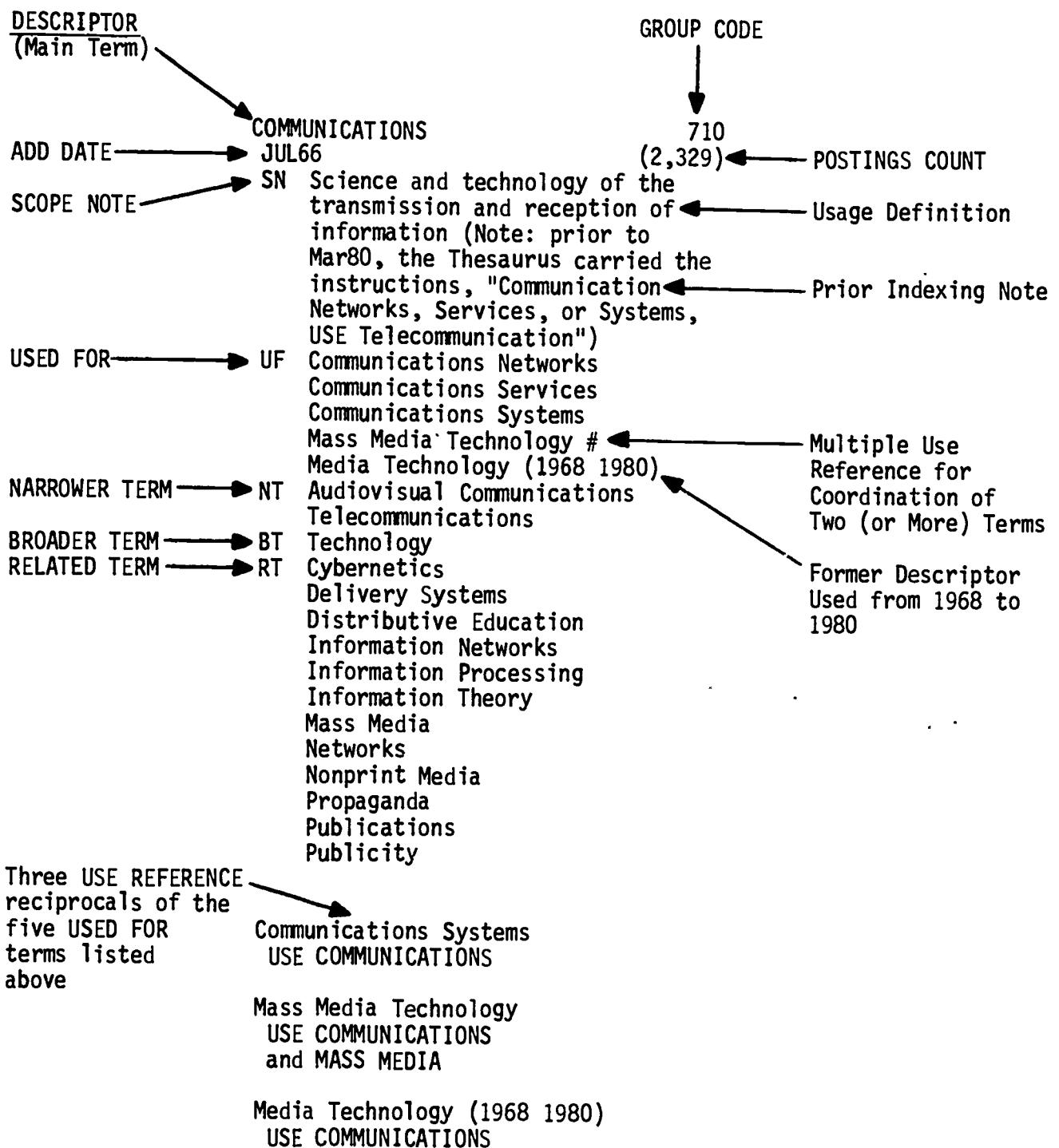


FIGURE VIII-1-3: SAMPLE THESAURUS ENTRY

(e) Add Dates

An Add (entry) Date, e.g., MAR80, accompanies each Descriptor in the main Alphabetical Display. Add Dates are assigned programmatically at the time a term enters the *Thesaurus* file. The earliest "real" Add Date is AUG68. Month and year of entry are given for each Descriptor added from AUG68 to the present. All Descriptors entered earlier than AUG68 have been given the arbitrary Add Date of JUL66, the approximate point in time at which ERIC indexing began.

Add Dates are intended to help users in the preparation of search strategies. They represent calendar dates, not RIE or CIJE issue dates. Rigid interpretation of Add Dates should be avoided. A given addition may not be effective in RIE or CIJE for up to 6 months after its Add Date. Also, because of backfile corrections, Descriptors may sometimes be seen on accessions that are earlier than the Add Dates of these same Descriptors. Additionally, postings of Descriptors carrying JUL66 may not actually go back that far in time, or may be earlier if applied to one of the original historical collections (Disadvantaged, OE Research Reports 1956-65, etc.)

(f) Postings Counts

As an additional aid to users, the Alphabetical Display provides a Postings Count for each Descriptor. This notation indicates the number of times the term has been used as either a major or minor Descriptor in ERIC indexing. It appears on the second line of the Descriptor display and above the Scope Note. In the Working Copy, it is to the right of the Add Date and within parentheses, and shows total ERIC postings for the term at the time the particular issue was produced. In the published *Thesaurus*, separate postings counts are given for CIJE and RIE.

Examination of the postings for a Descriptor may lead the user to check the term's cross-references. For example, a term with 3,000 postings cannot be searched easily manually, but one or more of its Narrower Terms (NTs) might well be. On the other hand, a term with only 15 postings might suggest that the searcher also consider including the term's Related Terms (RTs) or even its Broader Terms (BTs) in the search strategy.

All terms in the *Thesaurus* have actually been used in indexing. Terms showing zero postings are in the process of being re-posted as particular editions go to press, and will show their true postings in subsequent issues.

(g) Scope Notes

Descriptor Scope Notes (SNs) give definitions and/or usage restrictions, and often provide special instructions for indexers and searchers. For a complete discussion of Scope Notes (their roles, how they are developed, how to interpret them, etc.), see item C.2.d of this section.

(h) Cross-References

At least one of the following types of cross-references accompanies every Descriptor in the *Thesaurus' Alphabetical Display*. See items as indicated (in this section) for complete details about each type.

- UF (Used For)/USE References—item C.2.e.
- Narrower Terms/Broader Terms—item C.2.f.
- Related Terms—item C.2.g.

(i) Thesaurus Displays

In addition to the main Alphabetical Display, three additional displays of the *Thesaurus* are provided to assist in indexing and searching. These are the Rotated Display, Hierarchical Display, and Descriptor Group Display. See this section's item C.3 for a discussion of each.

(5) Former Main Terms

Former indexable Descriptors are identified in the *Thesaurus* by parenthetical "life span" notations, e.g., "(1969 1980)." These notations show the period of time in which the terms were used in indexing.

These terms fall into categories "(a)" and "(b)" below. A third category "(c)" no longer appears in the *Thesaurus*.

(a) "Transferred" Descriptors

These are former main terms that have been downgraded to the status of USE references, e.g.,

Personal Relationship (1966 1974)
USE INTERPERSONAL RELATIONSHIP

Physics Teachers (1967 1980)
USE PHYSICS
and SCIENCE TEACHERS

These notations indicate that the postings of the first term in each set were "transferred" to the other term(s), i.e., the terms were merged in order to facilitate retrieval. The reason for merging the first set was to consolidate the postings of two synonyms under a single preferred form. The reason for merging the second set was to eliminate a term that had been used infrequently (and somewhat inconsistently).

Reasons for transferring or merging Descriptors other than the need to collapse synonyms (or near-synonyms) and low-posted terms include replacement of obsolete, ambiguous, or incorrect terminology. All transactions of this nature are made only to facilitate retrieval, a fact that must be demonstrated before such changes are approved.

Parenthetical life span notations inform users of older manual indexes and computer files that they must use these former terms to achieve complete retrieval. The major data base vendors regularly update their ERIC files to reflect these postings changes, and users of these services need only to search currently active Descriptors to obtain records posted originally by the transferred terms.

(See also "Transferred Descriptors" discussion under "UF (Used For)/USE References," item C.2.e of this section.)

(b) Invalid "Dead" Descriptors

Occasionally, Descriptors have appeared in the *Thesaurus* file that, because of inherent ambiguity or subsequent indexing practices, are used so inconsistently that their utility in retrieval is seriously diminished. Such Descriptors, when discovered, are converted to invalid or "dead" terms.

Invalid Descriptors have the same display format as active Descriptors except for having no cross-references (no UFs, NTs, BTs, RTs). More important, however, are two additional identifying characteristics: a "life span" notation indicating the span of time the term was actually in use, and a Scope Note indicating how the term was used and leading indexers and searchers to more precise or meaningful terminology.

Example: SPATIAL RELATIONSHIP (1966 1980) 910
Mar80 (251)
SN Invalid Descriptor—Used for both the spatial relationship among areas of a facility and the spatial orientation of individuals—See the Descriptors "Spatial Relationship (Facilities)," "Spatial Ability," and "Personal Space" for these concepts

Invalid Descriptors have the same main-entry form as Descriptors that have been downgraded to UF status; however, there is a significant difference between the two. Former Descriptors shown in the *Thesaurus* as UFs are no longer carried in the ERIC computer files, i.e., their postings have been "transferred" to the preferred USE term(s). On the other hand, invalid Descriptors remain in the ERIC files; thus, a comprehensive computer search of subjects represented by invalid Descriptors would necessitate their inclusion in one's search strategy.

A major objective of the ERIC system is the maintenance of synchronous authority and index (postings) files. Most former main terms can be automatically reposted to one or more active Descriptors. Invalid Descriptors, however, cannot be handled in this manner. The inconsistency of their postings makes invalid Descriptors what they are. "Dead term" status effectively puts a hold on a concept, preventing its further use in indexing and allowing it to be set aside for possible manual reindexing (i.e., individual examination and reindexing of original records) at a later date. As time and funds permit, invalid Descriptors are reposted to preferred, active terms.

(See also discussion on "Ambiguous Usage" under "Scope Notes," item C.2.d of this section.)

(c) Deleted Descriptors

This third category of former main terms refers to concepts that have been totally removed from the *Thesaurus* file. The total number of terms in this group is quite small as compared to the other two categories, comprising no more than 30 Descriptors since ERIC became fully operational in 1966. These terms may be characterized by one of the following descriptions:

- Little-used ambiguous terms that encompass no appreciable subject content, e.g., ADVANCED SYSTEMS, LIMITED EXPERIENCE.

(These have been purged from the ERIC data base and are no longer searchable; they may, however, be seen in older printed indexes.)

- Little-used highly specific terms whose existence cannot be justified because there is little or no data in ERIC on the subjects they represent, e.g., BIRACIAL GOVERNMENT, CABINET TYPE PROJECTORS.

(Like the first type, these also have been purged and are no longer searchable.)

- Highly specific proper nouns or coined terminology that more appropriately should be posted in the Identifier field, e.g., CHAUTAUQUAS, NUCLEATION (LANGUAGE LEARNING).

(Though no longer in the *Thesaurus*, these terms are legitimate Identifiers and may be searched—see "Identifiers," section VIII (Part 2).)

c. Descriptor Groups

The ERIC *Thesaurus*, like many other information retrieval thesauri (particularly those that cover fields as broad as "education"), incorporates a system of broad subject categories into which all Descriptors are grouped. These "Descriptor Groups" essentially represent a "table of contents" to the *Thesaurus* and provide an overview of the subject coverage of the ERIC system. Descriptor Groups provide easy initial access to the *Thesaurus* and are particularly useful to new or infrequent ERIC indexers and searchers who need to quickly obtain a basic familiarity with the total ERIC vocabulary. Descriptor Groups can also be helpful to the more experienced user in providing a means of narrowing down the total number of terms to be looked at, whether the task is indexing, searching, or lexicographic analysis.

The current ERIC Descriptor Groups are listed in Figure VIII-1-4; each group is identified by a unique 3-digit code.

This set of 41 Descriptor Groups was developed during the 1977-80 Vocabulary Improvement Project and first appeared in the 8th published edition of the *Thesaurus* (Completely Revised, 1980). A previous set of 52 groups (developed in the late 1960s) appeared in earlier published *Thesaurus* editions. There was much overlap between the earlier groups and the *Thesaurus* hierarchies. One of the purposes of the revision was to eliminate, as much as possible, this unnecessary hierarchical reiteration.

Groups Related to LEARNING AND DEVELOPMENT

- 110 LEARNING AND PERCEPTION
120 INDIVIDUAL DEVELOPMENT AND CHARACTERISTICS

Groups Related to PHYSICAL AND MENTAL CONDITIONS

- 210 HEALTH AND SAFETY
220 DISABILITIES
230 MENTAL HEALTH
240 COUNSELING

Groups Related to EDUCATIONAL PROCESSES AND STRUCTURES

- 310 THE EDUCATIONAL PROCESS: CLASSROOM PERSPECTIVES
320 THE EDUCATIONAL PROCESS: SCHOOL PERSPECTIVES
330 THE EDUCATIONAL PROCESS: SOCIETAL PERSPECTIVES
340 EDUCATIONAL LEVELS, DEGREES, AND ORGANIZATIONS
350 CURRICULUM ORGANIZATION
360 STUDENTS, TEACHERS, SCHOOL PERSONNEL

Groups Related to CURRICULUM AREAS

- 400 SUBJECTS OF INSTRUCTION
410 AGRICULTURE AND NATURAL RESOURCES
420 ARTS
430 HUMANITIES
440 LANGUAGES
450 LANGUAGE AND SPEECH
460 READING
470 PHYSICAL EDUCATION AND RECREATION
480 MATHEMATICS
490 SCIENCE AND TECHNOLOGY

Groups Related to HUMAN SOCIETY

- 510 THE INDIVIDUAL IN SOCIAL CONTEXT
520 SOCIAL PROCESSES AND STRUCTURES
530 SOCIAL PROBLEMS
540 BIAS AND EQUITY
550 HUMAN GEOGRAPHY
560 PEOPLES AND CULTURES

Groups Related to SOCIAL/ECONOMIC ENTERPRISE

- 610 GOVERNMENT AND POLITICS
620 ECONOMICS AND FINANCE
630 LABOR AND EMPLOYMENT
640 OCCUPATIONS
650 BUSINESS, COMMERCE, AND INDUSTRY

Groups Related to INFORMATION AND COMMUNICATIONS

- 710 INFORMATION/COMMUNICATIONS SYSTEMS
720 COMMUNICATIONS MEDIA
730 PUBLICATION/DOCUMENT TYPES

Groups Related to MEASUREMENT AND RESEARCH

- 810 RESEARCH AND THEORY
820 MEASUREMENT
830 TESTS AND SCALES

Groups Related to FACILITIES AND EQUIPMENT

- 910 EQUIPMENT
920 FACILITIES

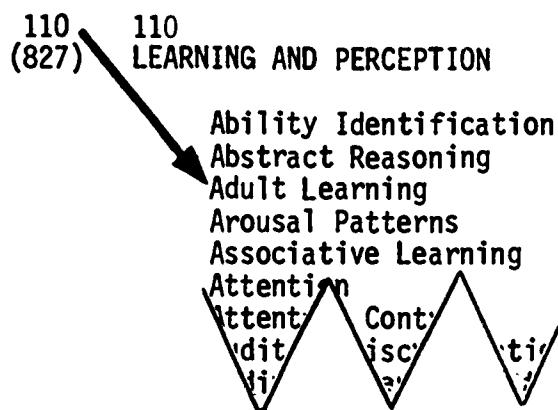
FIGURE VIII-1-4: DESCRIPTOR GROUPS

The Descriptor Group section of the published *Thesaurus* includes a Scope Note for each group, indicating subject coverage and including cross-references to other closely related groups. This is followed by a "Descriptor Group Display" in which the terms are listed alphabetically within each group.

The Descriptor Groups are represented by the series of 3-digit codes shown in Figure VIII-1-4. Each *Thesaurus* Descriptor has one of these codes in its record. The Alphabetical Display carries this code and serves as an index or key to the groups.

Example:

ADULT LEARNING
JUL66
BT Learning
RT Adult Development
Adult Education
Adult Programs
Adults
Adult Students
Lifelong Learning



The Descriptor Groups have had many roles in the past. At one time, the journal article citations in CIJE were arranged by Descriptor Groups. Several users have reported the utility of the groups in organizing various files, cataloging systems, awareness profiles, etc. Also, for a time, one of the online data base vendors included Group Codes as an ERIC search option, allowing retrieval of all documents posted by a group's terms or subsets of those terms, and coordination of an entire group with single *Thesaurus* terms.

While sometimes helpful in the refinement of online searches, Descriptor Groups are basically a tool for manual browsing, and users should be cautioned not to construe them as a formal classification scheme. Document indexing and search request formulation should never be based on the Descriptor Groups alone. Before accurate decisions can be made on the use of individual Descriptors, they must be seen in the context of their hierarchies (the Hierarchical Display is a classified arrangement) and of the main Alphabetical Display with its Scope Notes and cross-references.

Individual Descriptors may often be conceptually broader than their group assignments might imply. For example, terms that have been scoped to include subject matter both within and outside of the education field may be found in "Groups Related to Educational Processes and Structures." Such group assignments are based on the way the terms are most frequently used in ERIC indexing.

Each term in the *Thesaurus*, excluding UFs, is assigned to one Descriptor Group and to only one. However, many terms would admittedly appear to warrant assignment to more than one group. This situation is generally most apparent among closely related, conceptually overlapping Descriptor Groups (the groups are not mutually exclusive). The problem is currently handled with "see" and "see also" cross-references in the Scope Notes of the Descriptor Groups. Multiple-group assignments, while a possibility, are not planned for the immediate future. Such a capability would probably be most helpful when using the Descriptor Groups for searching, but more evidence of the day-to-day operational utility of the groups for this purpose is required.

The following guidelines are provided for selecting the one proper Descriptor Group for a given Descriptor:

- Group assignment should be made on the basis of the Descriptor's relationship to the entire field of education, rather than to a specialty (such as a particular Clearinghouse's subject area).
- Consult the Descriptor Group Display to determine:
 - The assignment of similar, parallel, comparable, or analogous concepts.
 - The assignment of terms that will be cross-referenced in the display of the Descriptor in question.
- Keep in mind that Descriptor Groups are adjuncts to other *Thesaurus* structures and displays. In evaluating whether a given term would be better in one group or another, consider its impact in each context. For instance, is CULTURE FAIR TESTS more illuminating or valuable to someone scanning the BIAS AND EQUITY group or the TESTS AND SCALES group? In this case, CULTURE FAIR TESTS is already displayed together with the other "test" terms in the Rotated Display, in the Hierarchical Display under TESTS, and in the main Alphabetical Display as a direct NT of TESTS. Assigning it to BIAS AND EQUITY provides a new view of this term.

- Use the guidance provided by the Descriptor Group Scope Notes. For instance, the Scope Note of the EQUIPMENT group says "see DISABILITIES for special equipment serving the handicapped," and one may find in this latter group such terms as HEARING AIDS and WHEELCHAIRS. The Scope Note of the OCCUPATIONS group specifically refers the user to a number of more precise groups, including HEALTH AND SAFETY, where terms such as NURSES and PHARMACISTS may be found.

Once the choice of the most appropriate Descriptor Group has been made for a given term, the 3-digit Group Code for that group is then entered along with the term and its display using the Vocabulary Development Form. (See Figure VIII-1-5 of this section.)

d. Scope Notes

(1) General

A Scope Note is a brief statement (370 character limit, including intervening blanks) of the intended usage of a Descriptor. It may be used to clarify an ambiguous term or to restrict the usage of a term.

Scope Notes may include all alphabetical, numerical, and special characters within the limits of machine character availability, except for the semicolon (;). The semicolon is used in ERIC as a subfield delimiter.

Scope Notes may be definitional, instructional, or both. As definitions, Scope Notes define terms for the purposes of their use in ERIC indexing. In a broader sense, definitional Scope Notes are, therefore, guides to what will be retrieved by searching on a Descriptor.

Instructional Scope Notes direct the user to other terms (Descriptors and/or Identifiers), indicate proper coordinations, provide historical notes on changes in usage or reference structure, or otherwise guide and explain preferred usage for both indexing and retrieval.

(2) Definitional Scope Notes

Definitional Scope Notes are used in the *Thesaurus* for the following categories of Descriptors:

- Fundamental concepts appearing both by themselves and as components of precoordinated Descriptors.

ABILITY

SN THE DEGREE OF ACTUAL POWER PRESENT IN AN ORGANISM OR SYSTEM TO PERFORM A GIVEN PHYSICAL OR MENTAL ACT (NOTE: USE A MORE SPECIFIC TERM IF POSSIBLE)

CHANGE

SN ACT OR PROCESS OF ALTERING, MODIFYING, TRANSFORMING, SUBSTITUTING, OR OTHERWISE MAKING OR BECOMING DIFFERENT -- INCLUDES DEVIATION FROM ESTABLISHED CHARACTER, CONDITION, SEQUENCE, OR DIRECTION (NOTE: DO NOT CONFUSE WITH "DEVELOPMENT," WHICH REFERS TO SEQUENTIAL, PROGRESSIVE CHANGES -- USE A MORE SPECIFIC TERM IF POSSIBLE)

- Homographs.

FREE SCHOOLS

SN ALTERNATIVE SCHOOLS OFFERING A COMPLETELY VOLUNTARISTIC FRAMEWORK, INCLUDING AN UNSTRUCTURED CURRICULUM AND A SPONTANEOUS LEARNING ENVIRONMENT - STUDENTS ARE FREE TO SELECT WHAT TO LEARN, WITH WHOM, WHEN, AND HOW -- GRADES, COMPETITION, AND COMPARISONS BETWEEN INDIVIDUALS ARE DISCARDED (NOTE: DO NOT CONFUSE WITH "FREE EDUCATION" OR "FREEDOM SCHOOLS")

- Descriptors containing words that may be ambiguous in some contexts.

LANGUAGE HANDICAPS

SN RECEPTIVE OR EXPRESSIVE LANGUAGE DISABILITIES (NOTE: USE "LEARNING DISABILITIES" IF THE DISABILITY IS BEING CONSIDERED IN AN EDUCATIONAL SETTING -- USE "SPEECH HANDICAPS" FOR IMPAIRMENTS OF THE PERIPHERAL SPEECH MECHANISMS)

SATELLITE FACILITIES

SN SUBSIDIARY FACILITIES THAT MAY BE SOME DISTANCE FROM THE FACILITY OR INSTITUTION TO WHICH THEY ARE ADMINISTRATIVELY RELATED

- Descriptors that include words that experience with the "terminology terrain" of education has shown are near-synonyms.

HUMAN RESOURCES

SN PEOPLE WHO CAN BE DRAWN UPON FOR THEIR KNOWLEDGE, SKILLS, OR PRODUCTIVE CAPACITIES (NOTE: DO NOT CONFUSE WITH "HUMAN CAPITAL")

INDIVIDUALIZED EDUCATION PROGRAMS

SN EDUCATIONAL PROGRAMS FOR INDIVIDUAL STUDENTS, EACH GEARED TO THE PARTICULAR STUDENT'S NEEDS AND CONDUCTED IN ACCORDANCE WITH A WRITTEN PLAN AGREED ON BETWEEN THE STUDENT (AND/OR PARENTS) AND SCHOOL OFFICIALS -- IEP'S WERE ORIGINALLY CONCEIVED FOR USE IN EDUCATING HANDICAPPED CHILDREN AND WERE GRADUALLY EXPANDED TO INCLUDE ALL SPECIAL NEEDS GROUPS

- Terms that have a specialized, uncommon meaning in ERIC usage.

LABORATORY TRAINING

SN METHOD OF TRAINING DESIGNED TO FACILITATE SELF INSIGHT, PROCESS AWARENESS, INTERPERSONAL COMPETENCE, AND DYNAMICS OF CHANGE

MAINSTREAMING

SN PROGRESSIVELY INCLUDING AND MAINTAINING EXCEPTIONAL STUDENTS (DISABLED OR GIFTED) IN CLASSES AND SCHOOLS WITH REGULAR OR NORMAL STUDENTS, WITH STEPS TAKEN TO SEE THAT SPECIAL NEEDS ARE SATISFIED WITHIN THIS ARRANGEMENT

- Terms generally not used in common discourse (even if commonly used in the literature).

NEONATES
SN AGED BIRTH TO 1 MONTH

SOCIOMETRIC TECHNIQUES
SN PROCEDURES USED TO IDENTIFY THE PREFERENCES, LIKES, OR DISLIKES OF THE MEMBERS OF A GROUP WITH RESPECT TO EACH OTHER, AS WELL AS TO IDENTIFY VARIOUS PATTERNS OF GROUP STRUCTURE OR INTERACTION

- Technical terms (even if commonly known among the relevant subject experts).

GENERATIVE PHONOLOGY
SN THEORY OR SYSTEM OF RULES WHICH DESCRIBES OR PREDICTS WELL-FORMED PHONOLOGICAL OUTPUTS, AND IS USED TO EXPRESS THE ABILITY OF SPEAKERS TO PRODUCE THE SOUNDS OF THEIR NATIVE LANGUAGE

MISCU ANALYSIS
SN EXAMINATION AND INTERPRETATION OF OBSERVED RESPONSES IN DRAL READING WHICH DO NOT MATCH EXPECTED RESPONSES, AS A TECHNIQUE FOR MEASURING THE LEARNER'S CONTRDL OF THE READING PROCESS

- Terms requiring historical notes, instructions for coordination with or reference to other Descriptors or Identifiers, or otherwise requiring explanation of usage.

ACCESSIBILITY (FOR DISABLED)
SN CHARACTERISTICS OF FACILITIES, PROGRAMS, AND SERVICES THAT ALLOW THEM TO BE ENTERED OR USED BY INDIVIDUALS DESPITE VISUAL, HEARING, MOBILITY, OR OTHER IMPAIRMENTS (NOTE: FOR PHYSICAL ACCESS, COORDINATE WITH "PHYSICAL MOBILITY" OR "VISUALLY HANDICAPPED MOBILITY" -- PRIOR TO JUN80, SEE ALSO "ARCHITECTURAL BARRIERS")

FUND RAISING
SN IDENTIFYING, SOLICITING, ACQUIRING, AND CULTIVATING FINANCIAL RESOURCES (NOTE: PRIOR TD FEB78, THE INSTRUCTION "FUND RAISING, USE FINANCIAL SUPPORT" WAS CARRIED IN THE THESAURUS)

RELATIONSHIP
SN TYPE DR MODE OF ASSOCIATION BETWEEN OR AMONG PHYSICALLY EXISTING ENTITIES, E.G., PEOPLE, INSTITUTIONS, OBJECTS (NOTE: USE A MORE SPECIFIC TERM IF POSSIBLE - - DO NOT CONFUSE WITH "CORRELATION" -- PRIOR TD MAR80, THE USE DF THIS TERM WAS NOT RESTRICTED BY A SCOPE NOTE)

SOCIAL WELFARE (1966 1980)
SN INVALID DESCRIPTOR -- USED FOR WELL-BEING AND VARIOUS TYPES OF SOCIAL SERVICES -- SEE "QUALITY OF LIFE" FOR FORMER CONCEPT, "WELFARE SERVICES" FOR ORGANIZED ASSISTANCE TO THE DISADVANTAGED, AND "SOCIAL SERVICES" DR OTHER APPROPRIATE TERMS FOR SOCIAL SERVICES PROVIDED TD THE GENERAL POPULATION

(3) Instructional Scope Notes

Instructional Scope Notes are best illustrated by providing a series of examples of their major types.

(a) "USE ANOTHER TERM..."

CAREER OPPORTUNITIES (1966 1980)
SN INVALID DESCRIPTOR -- USED
INCONSISTENTLY IN INDEXING -- USE
"CAREERS," AND, IF APPROPRIATE,
"EMPLOYMENT OPPORTUNITIES"

EDUCATIONAL FINANCE
SN ANY ASPECT OF RAISING AND
SPENDING REVENUE FOR EDUCATIONAL
PURPOSES (NOTE: USE A MORE
PRECISE TERM IF POSSIBLE)

(the phrase "use a more precise term if possible" is used when advising the indexer to use a less general term even though no specific Narrower Terms are cited)

ORAL READING
SN THE ACT OF READING ALOUD, OFTEN
USED TO DEVELOP OR TEST READING
SKILLS (NOTE: USE "READING ALOUD
TO OTHERS" WHEN THE PURPOSE OF
ORAL READING IS TO INFORM OR
ENTERTAIN A LISTENER OR GROUP OF
LISTENERS)

PROBLEMS
SN DIFFICULTIES OR OBSTACLES NOT
EASILY OVERCOME (NOTE: USE A MORE
SPECIFIC TERM IF POSSIBLE)

(the phrase "use a more specific term if possible" is used when advising use of a Narrower Term)

SATELLITES (AEROSPACE)
SN (NOTE: IF APPLICABLE, USE THE
MORE SPECIFIC TERM
"COMMUNICATIONS SATELLITES")

(i.e., don't overlook the one Narrower Term that's available)

(b) "SEE..., SEE ALSO..., FOR...SEE"

INTERNATIONAL STUDIES
SN MULTIDISCIPLINARY FIELD OF
INQUIRY CONCERNED WITH ANALYZING
SOCIAL PHENOMENA THAT OCCUR
WITHIN, BETWEEN, AND TRANSCENDING
NATIONALLY ORGANIZED POLITICS --
COMMONLY IDENTIFIED SUBFIELDS ARE
"INTERNATIONAL POLITICS,"
"FOREIGN POLICY," "INTERNATIONAL
LAW," "INTERNATIONAL
ORGANIZATION," "INTERNATIONAL
ECONOMICS," AND "COMPARATIVE AREA
STUDIES"

(reference is made to other subject areas without citing specific Descriptors)

INVENTIONS

SN ORIGINAL PRODUCTS OR PROCESSES
(THINGS NOT PREVIOUSLY EXISTING)
DEVELOPED BY CREATIVE THOUGHT OR
EXPERIMENTATION -- (NOTE: FOR
"DISCOVERIES," SEE THE DESCRIPTOR
"DISCOVERY PROCESSES")

PHARMACY

SN THE ART OR PRACTICE OF PREPARING,
PRESERVING, COMPOUNDING, AND
DISPENSING DRUGS (NOTE: SEE ALSO
"PHARMACOLOGY")

PRESSURE (1970 1980)

SN INVALID DESCRIPTOR -- ORIGINALLY
INTENDED AS A PHYSICAL SCIENCE
TERM BUT USED INCONSISTENTLY FOR
SOCIAL PRESSURE, PSYCHOLOGICAL
STRESS, ETC., AS WELL AS PHYSICAL
PRESSURE -- SEE SUCH DESCRIPTORS
AS "PRESSURE (PHYSICS),"
"POLITICAL INFLUENCES," "SOCIAL
INFLUENCES," AND "STRESS
VARIABLES"

UNCOMMONLY TAUGHT LANGUAGES

SN LANGUAGES NOT GENERALLY OFFERED
FOR INSTRUCTION IN THE UNITED
STATES EDUCATIONAL SYSTEM (NOTE:
ALSO SEE THE SPECIFIC LANGUAGE,
E.G., TURKISH, OR THE LANGUAGE
FAMILY, E.G., URALIC ALTAIC
LANGUAGES)

(c) "SEE ALSO...[IDENTIFIER]"

EQUIVALENCY TESTS

SN TESTS TO MEASURE THE EXTENT TO
WHICH PREVIOUS SCHOOLING,
KNOWLEDGE, OR EXPERIENCE
SATISFIES COURSE OR JOB
REQUIREMENTS (NOTE: SEE ALSO THE
IDENTIFIER "GENERAL EDUCATIONAL
DEVELOPMENT TESTS" -- PRIOR TO
SEP77 AND MAR80 RESPECTIVELY, THE
INSTRUCTIONS "GED TESTS, USE
EQUIVALENCY TESTS" AND
"PROFICIENCY EXAMINATIONS, USE
EQUIVALENCY TESTS" WERE CARRIED
IN THE THESAURUS)

**(d) "COORDINATE WITH..., COORDINATE OTHER TERMS...,
USE WITH..., COORDINATE WITH [IDENTIFIERS]"**

FOREIGN CULTURE

SN CULTURE REGARDED AS FOREIGN FROM
THE PERSPECTIVE OF THE DOCUMENT
OR JOURNAL ARTICLE (NOTE: USE
MAJOR GEOGRAPHIC IDENTIFIERS TO
IDENTIFY THE FOREIGN CULTURE, AND
MINOR GEOGRAPHIC IDENTIFIERS TO
IDENTIFY THE NATIVE CULTURE --
PRIOR TO MAR80, THIS TERM WAS NOT
RESTRICTED BY A SCOPE NOTE AND
CARRIED NO SPECIAL INSTRUCTION)

HEARINGS

SN SESSIONS IN WHICH WITNESSES ARE HEARD AND TESTIMONY IS RECORDED
(NOTE: FOR U.S. CONGRESSIONAL HEARINGS, COORDINATE "HEARINGS" WITH SUCH IDENTIFIERS AS "CONGRESS," "CONGRESS 95th," ETC.)

LANGUAGE TESTS

SN TESTS TO MEASURE PROFICIENCY, DIAGNOSE STRENGTHS AND WEAKNESSES, OR PREDICT FUTURE PERFORMANCE IN A NATIVE OR FOREIGN LANGUAGE (NOTE: FOR FOREIGN LANGUAGE TESTS, COORDINATE THIS TERM WITH "SECOND LANGUAGE LEARNING," AND, WHEN APPROPRIATE, THE LANGUAGE)

MEDICAL RECORD ADMINISTRATORS

SN INDIVIDUALS WHO PLAN, DEVELOP, AND ADMINISTER MEDICAL RECORD SYSTEMS FOR HOSPITALS, CLINICS, HEALTH CENTERS, ETC. (NOTE: FOR LIBRARIANS IN MEDICAL LIBRARIES, COORDINATE "LIBRARIANS" AND "MEDICAL LIBRARIES" -- FOR LIBRARIANS WHO ARE DIRECTLY INVOLVED IN PATIENT CARE, USE THE IDENTIFIER "CLINICAL MEDICAL LIBRARIANS")

(e) "USE FOR..."

SEX FAIRNESS

SN THE CORRECTION OF SEX BIAS OR DISCRIMINATION (NOTE: USE FOR DESCRIPTIONS OF MATERIALS, PROCEDURES, ACTIVITIES, OR PROGRAMS THAT TREAT THE SEXES EQUITABLY)

(f) "DO NOT USE FOR..."

READING DIFFICULTIES

SN PROBLEMS IN READING, CAUSED EITHER BY DISABILITIES ASSOCIATED WITH PSYCHOLOGICAL PROCESSES OR BY SUCH FACTORS AS PHYSICAL OR SENSORY HANDICAPS, CULTURAL BACKGROUND, LOW ABILITY, ETC. (NOTE: DO NOT USE FOR "READABILITY" -- THE PREVIOUS TERM "READING DIFFICULTY" WAS NOT SCOPED AND WAS OFTEN CONFUSED WITH "READABILITY")

(g) "DO NOT CONFUSE WITH..."

PROGRAM DEVELOPMENT
SN PROCESS OF FORMULATING A SCHEME,
DEVISING PROCEDURES, OR PLANNING
ACTIVITIES WITH REGARD TO
SPECIFIC PROGRAM OBJECTIVES
(NOTE: DO NOT CONFUSE WITH
"PROGRAM DESIGN" OR "PROGRAM
IMPLEMENTATION" -- PRIOR TO
MAR80, THE USE OF THIS TERM WAS
NOT RESTRICTED BY A SCOPE NOTE)

(h) "SEE.../USE..." Other Sections of the *Thesaurus*

CATALOGS
SN (NOTE: USE A MORE SPECIFIC TERM
IF POSSIBLE -- SEE ALSO
"REFERENCE MATERIALS" HIERARCHY
FOR MORE PRECISE TERMINOLOGY)

(refers to Hierarchical
Display)

TEACHERS
SN (NOTE: SEE "FACULTY" FOR OTHER
SPECIFIC TERMINOLOGY RELATED TO
"TEACHERS")

(refers to another term
and all its cross-references
in the Alphabetical Display)

UNIVERSITIES
SN DEGREE-GRANTING INSTITUTIONS OF
HIGHER EDUCATION THAT TYPICALLY
INCLUDE A LIBERAL ARTS
UNDERGRADUATE COLLEGE, A GRADUATE
SCHOOL, AND TWO OR MORE
UNDERGRADUATE AND GRADUATE
PROFESSIONAL SCHOOLS (NOTE: FOR
SPECIFIC ASPECTS, USE A "COLLEGE"
TERM WHERE A CORRESPONDING
"UNIVERSITY" TERM IS NOT
AVAILABLE)

(refers to the entire
range of terms having the
same word—thus, the
Rotated Display)

(4) Historical Notes

(a) Previous UF Established as Main Term

DAY CARE CENTERS
SN PROFESSIONALLY RUN FACILITIES
THAT CARE FOR GROUPS OF CHILDREN
ON A PARTIAL OR FULL DAY BASIS
(NOTE: PRIOR TO MAR80, THE
INSTRUCTION "DAY CARE CENTERS,"
USE DAY CARE SERVICES" WAS
CARRIED IN THE THESAURUS)

REDUCTION IN FORCE
SN REDUCTION IN THE TOTAL NUMBER OF
PEOPLE EMPLOYED BY AN
ORGANIZATION -- INCLUDES SUCH
METHODS AS LAYING OFF PERSONNEL,
CREATING EARLY RETIREMENT
OPTIONS, TRANSFERRING PERSONNEL,
AND NOT FILLING OPENINGS CREATED
THROUGH NORMAL STAFF ATTRITION
(NOTE: PRIOR TO MAR77, THE
INSTRUCTION "REDUCTION IN FORCE,"
USE "JOB LAYOFF" WAS CARRIED IN
THE THESAURUS)

(b) Another Descriptor Used Previously for This Concept

COLLEGE SECOND LANGUAGE PROGRAMS
SN (NOTE: PRIOR TO MAR80, THIS CONCEPT WAS INDEXED UNDER "COLLEGE LANGUAGE PROGRAMS")

SCHOOL CATALOGS
SN PUBLICATIONS ISSUED BY SCHOOLS TO PROVIDE INFORMATION ON THEIR COURSES, FACULTY, FACILITIES, ETC. (NOTE: PRIOR TO MAR80, "CATALOGS" WAS USED TO INDEX THIS CONCEPT)

(c) Significant Change in Scope

POSTSECONDARY EDUCATION
SN ALL EDUCATION BEYOND THE SECONDARY LEVEL -- INCLUDES LEARNING ACTIVITIES AND EXPERIENCES BEYOND THE COMPULSORY SCHOOL ATTENDANCE AGE WITH THE EXCEPTION OF ADULT BASIC EDUCATION AND HIGH SCHOOL EQUIVALENCY PROGRAMS (NOTE: APPEARS IN THE LIST OF MANDATORY EDUCATIONAL LEVEL DESCRIPTORS -- BEFORE APR75, RESTRICTED TO EDUCATION BEYOND GRADE 12 AND LESS THAN THE BACCALAUREATE LEVEL)

(d) Previous Usage Has Varied

(Useful for dealing with terms that have been used inconsistently)

FIELD EXPERIENCE PROGRAMS
SN PRACTICAL EXPERIENTIAL LEARNING ACTIVITIES UNDER INSTITUTIONAL OR ORGANIZATIONAL SPONSORSHIP, USUALLY AWAY FROM THE CLASSROOM OR CAMPUS -- ASSOCIATED MOST OFTEN WITH GRADES 10-16, AND CHARACTERIZED AS LESS FORMAL AND CONCENTRATED THAN PROFESSIONAL INTERNSHIP PROGRAMS (NOTE: BEFORE JUN78, THE USE OF THIS TERM WAS NOT RESTRICTED BY A SCOPE NOTE)

(restricts term to one meaning, gives date of restriction)

INEQUALITIES (1970 1980)
SN INVALID DESCRIPTOR -- USED INCONSISTENTLY IN INDEXING -- FOR MATHEMATICAL INEQUALITIES, USE "INEQUALITY (MATHEMATICS)" -- FOR EDUCATIONAL INEQUALITIES, USE "EQUAL EDUCATION" -- FOR SOCIAL OR ECONOMIC INEQUALITIES, SEE "DISADVANTAGE" OR DESCRIPTORS RELATING TO SOCIAL, RACE, SEX, OR ETHNIC BIAS OR DISCRIMINATION

(gives alternatives to an ambiguous term that has been made invalid)

PRODUCTIVE THINKING
SN CREATIVE THINKING THAT RESULTS IN SOMETHING NEW (NOTE: PRIOR TO MAR80, THE USE OF THIS TERM WAS NOT RESTRICTED BY A SCOPE NOTE)

SECURITY (PSYCHOLOGY)
SN BEING OR FEELING FREE FROM RISK OR UNCERTAINTY (NOTE: THE DESCRIPTOR "SECURITY," WITHOUT THE PARENTHETICAL QUALIFIER, WAS USED FROM 1967 TO MAR78)

(refers to an invalid "dead" term on which this improved term is based)

TELECOURSES
SN SEQUENCES OF LESSONS OFFERED OVER TELEVISION FOR CREDIT OR AUDITING PURPOSES (NOTE: FOR COURSES ON THE SUBJECT OF TELEVISION, USE "TELEVISION CURRICULUM" -- PRIOR TO MAR80, THIS TERM DID NOT CARRY A SCOPE NOTE)

(restricts term to one meaning and indicates appropriate term covering alternative meaning)

UNITED STATES HISTORY
SN (NOTE: PRIOR TO MAR80, "AMERICAN HISTORY" WAS OCCASIONALLY USED FOR THIS CONCEPT)

(5) Notes Indicating a Range of Possible Applications or Subsumed Concepts

"Includes," "Example," and "Excludes" Scope Notes are useful devices for delineating the range of subject matter, characteristics, attributes, conditions, properties, or settings, found among the usages of a Descriptor.

(a) "INCLUDES..." Scope Notes

AMERICAN INDIANS
SN BOTH NORTH AND SOUTH AMERICAN INDIANS

ANNUAL REPORTS
SN INCLUDES DATA ON PROGRESS, FINANCE, MATERIAL, PERSONNEL, INSTRUCTION, ETC.

LANGUAGE MAINTENANCE
SN THE MAINTENANCE OF A GIVEN LANGUAGE RATHER THAN ITS DISPLACEMENT BY ANOTHER LANGUAGE (INCLUDES MAINTAINING THE LANGUAGES OF CULTURAL MINORITY GROUPS THROUGH FAMILY PRACTICES, RITUALS, CONCERTED EDUCATIONAL ENDEAVORS WITH SOCIETY AT LARGE, ETC.)

LATENT TRAIT THEORY
SN THE STUDY OF TEST AND ITEM SCORES
BASED ON ASSUMPTIONS CONCERNING
THE MATHEMATICAL RELATIONSHIP
BETWEEN ABILITIES (OR OTHER
HYPOTHESIZED TRAITS) AND ITEM
RESPONSES (NOTE: "LATENT TRAIT
THEORY" INCLUDES BOTH THE "RASCH
MODEL" AND THE "BIRNBAUM MODELS"
- SEE THOSE IDENTIFIERS)

(refers to specific
Identifiers that embody
the concept)

MECHANICS (PHYSICS)
SN THE SCIENCE THAT DEALS WITH THE
EFFECTS OF ENERGY AND FORCE ON
THE EQUILIBRIUM, DEFORMATION,
OR MOTION OF SOLID, LIQUID, AND
GASEOUS BODIES -- INCLUDES BOTH
CLASSICAL (NEWTONIAN) AND MODERN
(ATOMIC-LEVEL) MECHANICS

NONINSTRUCTIONAL STUDENT COSTS
SN CDSCTS MET BY STUDENTS THAT ARE
NOT INSTRUCTIONAL COSTS (TUITION,
ETC.) BUT ARE NECESSARY IN THE
PURSUIT OF AN EDUCATION --
INCLUDES ROOM AND BOARD,
TRANSPORTATION EXPENSES, BOOK
COSTS, PERSONAL EXPENSES, FORGONE
INCOME, ETC.

(distinguishes the
term from its
antonym)

PHYSICAL EXAMINATIONS
SN MEDICAL INSPECTIONS OF
INDIVIDUALS TO DETERMINE THEIR
PHYSICAL CONDITION, INCLUDING THE
DETECTION OF PRESENT OR POTENTIAL
DYSFUNCTION

(b) "Example" Scope Notes: "E.G.," "SUCH AS...," "AS IN..."

"Includes" and "Example" Scope Notes are similar
in that they indicate scope by providing lists of
subsumed concepts or by providing examples of possible
applications.

ARTIFICIAL LANGUAGES
SN LANGUAGES CREATED FOR
INTERNATIONAL COMMUNICATION,
E.G., ESPERANTO AND INTERLINGUA

ASIAN STUDIES
SN STUDIES, USUALLY
INTERDISCIPLINARY IN APPROACH, OF
SUCH GEOGRAPHIC AREAS AS ASIATIC
U.S.S.R., BANGLADESH, BHUTAN,
CHINA, INDIA, INDONESIA,
JAPAN, KOREA, MALDIVE ISLANDS,
MONGOLIA, NEPAL, PAKISTAN, THE
PHILIPPINES, SRI LANKA, AND THE
SOUTHEAST ASIAN SUBCONTINENT

DEVELOPMENTAL STAGES	NEW JOURNALISM
SN NATURAL OR COMMON DIVISIONS OF THE HUMAN DEVELOPMENTAL PROCESS, CHARACTERIZED BY TYPES OF BEHAVIOR (AS IN THE ORAL STAGE), BY BIOLOGICAL PROPERTIES OR MANIFESTATIONS (AS IN THE EMBRYONIC STAGE), OR BY MENTAL PROCESSES (AS IN PIAGET'S "CONCRETE OPERATIONS" STAGE)	SN REPORTING WHICH COMBINES TRADITIONAL JOURNALISM TECHNIQUES WITH SUCH DEVICES OF FICTION WRITING AS: SCENE BY SCENE RECONSTRUCTION OF SETTINGS, RECORDING OF DIALOGUE, USE OF THIRD PERSON POINT-OF-VIEW, AND EXTENSIVE RECORDING OF EXTERNAL CHARACTERISTICS OF INDIVIDUAL CHARACTERS -- EMPHASIS IS ON CAPTURING THE "CONCRETE REALITY" OR "IMMEDIACY" OF CULTURAL PHENOMENA
ELIGIBILITY	
SN QUALIFYING FOR CERTAIN BENEFITS OR SERVICES (E.G., STUDENT ELIGIBILITY FOR FINANCIAL AID, INSTITUTIONAL ELIGIBILITY FOR ACCREDITATION, FAMILY ELIGIBILITY FOR WELFARE ASSISTANCE, EMPLOYEE ELIGIBILITY FOR RETIREMENT)	

(c) "Excludes" Scope Notes: "OTHER THAN...," "RATHER THAN...," "UNLIKE...," and "NOT"

Sometimes it is easier to define a scope by stating what is excluded. This approach can both point to and distinguish from a Descriptor representing the excluded concept.

ABSTRACT REASONING	MIDDLE MANAGEMENT
SN PROCESS OF REACHING CONCLUSIONS THROUGH THE USE OF SYMBOLS OR GENERALIZATIONS RATHER THAN ON CONCRETE FACTUAL INFORMATION	SN THE INTERMEDIATE LEVEL OF MANAGEMENT, EXCLUDING TOP-LEVEL MANAGEMENT ON THE ONE HAND AND FIRST-LEVEL SUPERVISION ON THE OTHER
ANALOG COMPUTERS	NONPROFIT ORGANIZATIONS
SN COMPUTERS THAT TRANSLATE PHYSICAL CONDITIONS (FLOW, TEMPERATURE, PRESSURE, ETC.) INTO RELATED MECHANICAL OR ELECTRICAL QUANTITIES (LENGTH, VOLTAGE, CURRENT, ETC.) -- UNLIKE DIGITAL COMPUTERS, WHICH COUNT DISCRETE QUANTITIES, ANALOG COMPUTERS MEASURE CONTINUOUS VARIABLES	SN ORGANIZATIONS NOT DESIGNED PRIMARILY TO PAY DIVIDENDS ON INVESTED CAPITAL (NOTE: PRIOR TO DEC77, THE INSTRUCTION "NONPROFIT ORGANIZATIONS, USE VOLUNTARY AGENCIES" WAS CARRIED IN THE THESAURUS)
INFORMAL ASSESSMENT	TORTS
SN APPRAISAL OF AN INDIVIDUAL'S OR GROUP'S STATUS OR GROWTH BY MEANS OTHER THAN STANDARDIZED INSTRUMENTS	SN PRIVATE OR CIVIL WRONGS, NOT INCLUDING BREACH OF CONTRACT, FOR WHICH PERPETRATORS MAY BE LEGALLY PROSECUTED AND INJURED PARTIES MAY BE COMPENSATED
LOW VISION AIDS	
SN LENSES OR DEVICES OTHER THAN CONVENTIONAL EYEGLASSES USED TO IMPROVE VISUAL FUNCTIONING IN THE PARTIALLY SIGHTED	

(6) Notes That Slant Meaning or Emphasis in Certain Directions (Without Precluding Other Possibilities)

Words such as "usually" can be important hedges in Scope Notes, avoiding excessively tight definitions. "Usually" and "generally" can also be helpful when definitions supplied by authorities differ or where shifts in meaning have occurred over time.

These qualifiers can be viewed as a continuum from "not-quite-absolute" to "maybe"—

(a) "ALMOST ALWAYS..."

IMMERSION PROGRAMS

SN EDUCATIONAL PROGRAMS IN WHICH ALL CURRICULUM MATERIALS ARE TAUGHT IN A SECONO LANGUAGE, GENERALLY AT THE ELEMENTARY LEVEL AND ALMOST ALWAYS WITHIN THE CONTEXT OF A FIRST LANGUAGE SCHOOL

(b) "ESPECIALLY...," "PARTICULARLY..."

EDUCATIONAL MALPRACTICE

SN WRONGFUL OR NEGLIGENT ACTS ON THE PART OF TEACHERS OR SCHOOLS THAT RESULT (OR MAY RESULT) IN STUDENT DETERIMENTS, ESPECIALLY INCLUDING THE FAILURE OF STUDENTS TO LEARN

PHARMACOLOGY

SN THE SCIENCE OF THE NATURE AND PROPERTIES OF DRUGS, PARTICULARLY THEIR ACTIONS OR EFFECTS (NOTE: SEE ALSO "PHARMACY")

(c) "USUALLY..."

ENDOWMENT FUNDS

SN CAPITAL SUMS SET ASIDE AS SOURCES OF INCOME -- THE PRINCIPAL OF EACH SUM IS USUALLY LEFT INTACT AND INVESTED, WHILE THE INCOME MAY BE EXPENDED

RETRENCHMENT

SN REDUCTION OF COSTS OR EFFORTS, USUALLY AS AN ECONOMIC NECESSITY

(d) "GENERALLY...," "NORMALLY..."

BUILDING SYSTEMS

SN ASSEMBLIES OF BUILDING SUBSYSTEMS AND COMPONENTS (STRUCTURAL AND MECHANICAL), WITH INSTRUCTIONS FOR PUTTING THEM TOGETHER -- NORMALLY THESE COMPONENTS ARE MASS-PRODUCED AND USED FOR SPECIFIC GENERIC PROJECTS IN BUILDING CONSTRUCTION

CURRICULUM

SN PLAN INCORPORATING A STRUCTURED SERIES OF INTENDED LEARNING OUTCOMES AND ASSOCIATED LEARNING EXPERIENCES -- GENERALLY ORGANIZED AS A RELATED COMBINATION OR SERIES OF COURSES (NOTE: USE A MORE SPECIFIC TERM IF POSSIBLE)

LIFETIME SPORTS

SN SPORTS WHERE PARTICIPATION CAN BE CARRIED ON THROUGHOUT ONE'S LIFETIME -- GENERALLY INCLUDES (BUT IS NOT NECESSARILY LIMITED TO) A VARIETY OF INDIVIDUAL AND DUAL SPORTS FOR WHICH FACILITIES ARE WIDELY AVAILABLE, AND BODY CONTACT IS LIMITED OR UNNECESSARY

(e) "FREQUENTLY..."

CAREER EXPLORATION

SN INVESTIGATING OCCUPATIONAL INTEREST AREAS OFTEN THROUGH REAL OR SIMULATED JOB EXPERIENCE -- FREQUENTLY REFERS TO THE SECOND PHASE OF CAREER EDUCATION APPROPRIATE FOR GRADES 6 THROUGH 10

(f) "OFTEN..."

CAREER AWARENESS

SN APPRECIATION FOR AND UNDERSTANDING OF THE VARIETY OF TYPES OF CAREERS -- OFTEN REFERS TO THE INITIAL PHASE OF CAREER EDUCATION APPROPRIATE TO THE ELEMENTARY SCHOOL

HANDICRAFTS

SN CREATIVE ACTIVITIES OF MAKING ARTICLES BY HAND, OFTEN WITH THE AID OF SIMPLE TOOLS OR MACHINES -- ALSO, THE HANDIWORKS RESULTING FROM SUCH ACTIVITIES

(g) "SOMETIMES..."

ALTRUISM

SN CONSIDERATION FOR THE WELFARE OF OTHERS, SOMETIMES IN ACCORDANCE WITH AN ETHICAL SYSTEM

LABOR EDUCATION

SN EDUCATION AND TRAINING OF WORKERS OFTEN SPONSORED BY LABOR UNIONS AND SOMETIMES IN COOPERATION WITH EDUCATIONAL INSTITUTIONS

COLLEGE GOVERNING COUNCILS

SN ORGANIZATIONS OF FACULTY REPRESENTATIVES, SOMETIMES INCLUDING ADMINISTRATORS AND STUDENTS, THAT CONSIDER ADMINISTRATIVE, ACADEMIC, OR OPERATIONAL POLICIES OF THE INSTITUTION

(h) "PERHAPS..."

SELF SUPPORTING STUDENTS
SN STUDENTS WHO ARE LEGALLY (OR
PERHAPS FINANCIALLY) INDEPENDENT
OF THEIR PARENTS OR FORMER
GUARDIANS

(i) "EMPHASES ON...," "ATTENTION ON..."

Special features or characteristics can be indicated in a number of ways—

• "WITH EMPHASIS...," "EMPHASIS IS ON..."

COMMUNICATIVE COMPETENCE
(LANGUAGES)
SN THE ABILITY TO CONVERSE OR
CORRESPOND WITH A NATIVE SPEAKER OF
THE TARGET LANGUAGE IN A REAL-LIFE
SITUATION, WITH EMPHASIS ON
COMMUNICATION OF IDEAS RATHER THAN
ON CORRECTNESS OF LANGUAGE FORM

ORIENTEERING
SN THE ACT OR SPORT OF CROSS-COUNTRY
NAVIGATION USING A MAP AND COMPASS
AS GUIDES -- EMPHASIS IS ON
DETERMINING, THEN TAKING, THE
SHORTEST AND QUICKEST WAY TO A
SPECIFIED DESTINATION

• "WITH ATTENTION TO...," "ATTENTION IS GIVEN TO..."

ANTHROPOLOGICAL LINGUISTICS
SN APPLICATION OF ANTHROPOLOGICAL AND
LINGUISTIC TECHNIQUES TO THE STUDY OF
SPEECH COMMUNITIES, PARTICULARLY THOSE
WITH NO WRITING SYSTEM -- ATTENTION IS
GIVEN TO SPECIFIC INTERRELATIONSHIPS
IN THE CONCURRENT AND SYSTEMATIC
DEVELOPMENT OF CULTURE AND LANGUAGE

• "ASSOCIATED WITH..."

(See FIELD EXPERIENCE PROGRAMS, page VIII-1-41.)

(7) Special Problems in Meaning and Usage Treated by Scope Notes

(a) Relational Homographs

"Relational homographs" are those terms whose meaning changes according to the direction of the relationship between the component concepts. Such terms should always be scoped. Whether they should be scoped to exclude one meaning or to include both will depend upon their usage.

Generally, if a relational homograph has been used primarily in only one sense, it should be scoped to exclude the other meaning. It should always be scoped to exclude the other meaning when other Descriptors exist to cover that other meaning. Examples:

COUNSELOR EVALUATION
SN PROCESS OF JUDGING COUNSELOR
PERFORMANCE AS RELATED TO
ESTABLISHED CRITERIA

EMPLOYEE ATTITUDES
SN ATTITUDES OF, NOT TOWARD,
EMPLOYEES

PRIVATE FINANCIAL SUPPORT
SN FINANCIAL AID RECEIVED FROM
PRIVATE SOURCES (NOTE: DO NOT
CONFUSE WITH "PRIVATE SCHOOL
AID")

TEACHER GUIDANCE
SN GUIDANCE PROVIDED BY TEACHERS
(NOTE: PRIOR TO MAR80, THIS TERM
WAS NOT SCOPED AND WAS SOMETIMES
USED TO INDEX GUIDANCE GIVEN
TO TEACHERS)

TEACHER DISCIPLINE
SN DISCIPLINE OF, NOT
BY, TEACHERS

Only occasionally should a relational homograph be scoped to include both meanings, e.g.,

PUBLIC TELEVISION
SN NON-COMMERCIAL TELEVISION,
PUBLICLY OWNED AND OPERATED, THAT
IS DEDICATED TO EDUCATIONAL,
CULTURAL, AND PUBLIC-SERVICE
PROGRAMS (both by and for the public)

(b) "Double" Scope Notes

Many concepts have two (or more) meanings or uses that are so closely related that they must be considered synonymous from the point of view of retrieval. ADJUSTMENT, for example, is both a condition and a process and is scoped as such. Most of the time such usage can be easily handled in the initial clause of a Scope Note; the *Thesaurus* provides many examples—

"BEING OR FEELING..."
"THE STATE OR QUALITY OF..."
"TRAITS OR QUALITIES..."
"THE ACT OR SPORT OF..."
"THE CONDITION AND PROCESS OF..."

In some cases, however, it is helpful to make the dual role of such concepts more obvious or explicit. This can be done through a "double" (or multiple)

Scope Note. The Scope Note for DESIGN illustrates this by including the meaning of the term both as a noun and as a verb:

DESIGN

SN THE PROCESS OF CONCEIVING AND
SELECTING THE STRUCTURE,
ELEMENTS, ARRANGEMENT, MATERIALS,
STEPS, OR PROCEDURES OF SOME
ACTIVITY OR THING -- ALSO, THE
PLAN, LAYOUT, OR MENTAL SCHEME
THAT RESULTS (NOTE: USE A MORE
SPECIFIC TERM IF POSSIBLE)

Other "double" Scope Notes show meanings that while separable are so conceptually intertwined that there would be little or no advantage to trying to tease them apart, e.g.,

FISCAL CAPACITY

SN WEALTH OF A GOVERNMENT,
INSTITUTION, ORGANIZATION, OR
INDIVIDUAL -- ALSO, THE RELATIVE
ABILITY TO OBTAIN REVENUE

SOCIAL COGNITION

SN CONCEPTIONS ABOUT INTERPERSONAL
AND SOCIAL PHENOMENA (E.G.,
PERSONS, THE SELF, MOTIVES,
FEELINGS, RELATIONS, SOCIAL
RULES, SOCIETAL INSTITUTIONS) --
ALSO, COGNITIVE PROCESSES AND
SKILLS USED IN SOCIAL INTERACTION
(E.G., COMMUNICATION SKILLS,
PERSPECTIVE TAKING, EMPATHY)

A frequent need for double Scope Notes is found in the Descriptors representing the various intellectual disciplines, which in ERIC are also curriculum areas:

INTERNATIONAL RELATIONS

SN RELATIONS AMONG POLITICAL UNITS OF
NATIONAL RANK -- ALSO, A FIELD OF
STUDY (OFTEN CONSIDERED AS A BRANCH
OF POLITICAL SCIENCE) DEALING
PRIMARILY WITH FOREIGN POLICIES,
THE ORGANIZATION AND FUNCTION OF
GOVERNMENTAL AGENCIES CONCERNED
WITH FOREIGN POLICY, AND THE
FACTORS (AS GEOGRAPHY AND
ECONOMICS) UNDERLYING FOREIGN
POLICY

The meaning of terms may also vary between or among disciplines. These terms may be double-scoped when retrieval is not affected, e.g., when two contexts are so closely related that searchers would usually want them both and when other additional index terms would normally be used to distinguish the contexts.
Example:

ERROR ANALYSIS (LANGUAGE)
SN IN LANGUAGE TEACHING AND TESTING, A
TECHNIQUE OF MEASURING PROGRESS AND
OF REVISING TEACHING METHODS BY
RECORDING AND CLASSIFYING THE
MISTAKES MADE BY STUDENTS -- IN
LINGUISTICS, THE OBSERVATION OF
ERRORS IN THE SPEECH PROCESS AS A
MEANS OF UNDERSTANDING THE
PHONOLOGICAL AND SEMANTIC
COMPONENTS OF LANGUAGE,
INTERACTIONAL PROCESSES, AND
SPEAKERS' DISCOURSE STRATEGIES

Also, some terms are used interchangeably in both
broad and narrow senses, e.g.,

EDUCATIONAL TECHNOLOGY
SN SYSTEMATIC IDENTIFICATION,
DEVELOPMENT, ORGANIZATION, OR
UTILIZATION OF EDUCATIONAL
RESOURCES AND/OR THE MANAGEMENT
OF THESE PROCESSES --
OCCASIONALLY USED IN A MORE
LIMITED SENSE TO DESCRIBE THE USE
OF EQUIPMENT-ORIENTED TECHNIQUES
OR AUDIOVISUAL AIDS IN
EDUCATIONAL SETTINGS

(c) "Forced" Concepts

Concepts that, in indexing, have been "forced"
into being represented by a closely related Descriptor,
should be established as new Descriptors if the initial
Descriptor becomes moderately to well posted or high
to moderate search interest develops.

Where the "forced" concept has in the past been
represented in the *Thesaurus* by a USE reference,
creation of a note linking past with present is
appropriate, e.g.,

BEHAVIOR MODIFICATION
SN ALTERATION OF BEHAVIOR BY THE USE
OF CONDITIONING TECHNIQUES (NOTE:
PRIOR TO 1980, THE INSTRUCTION
"BEHAVIOR MODIFICATION, USE
BEHAVIOR CHANGE" WAS CARRIED IN
THE THESAURUS)

When no USE reference is present (or where the
word form of the USE reference varies from that
selected as the preferred form of the new Descriptor),
the historical note linking the term with its prior
indexing requires other forms, e.g.,

MULTICULTURAL EDUCATION
SN EDUCATION INVOLVING TWO OR MORE ETHNIC GROUPS AND DESIGNED TO HELP PARTICIPANTS CLARIFY THEIR OWN ETHNIC IDENTITY AND APPRECIATE THAT OF OTHERS, REDUCE PREJUDICE AND STEREOTYPING, AND PROMOTE CULTURAL PLURALISM AND EQUAL PARTICIPATION (NOTE: DO NOT CONFUSE WITH "CROSS CULTURAL TRAINING," WHICH, PRIOR TO JAN79, WAS FREQUENTLY USED FOR "MULTICULTURAL EDUCATION")

Where two concepts have previously been "forced" under one Descriptor as a result of "word indexing" (i.e., indexing strictly by words rather than by the meanings behind them), a reciprocal historical note should be made, e.g.,

FOUNDATION PROGRAMS
SN SYSTEMS WHEREBY STATE FUNDS ARE USED TO SUPPLEMENT LOCAL OR INTERMEDIATE SCHOOL DISTRICT FUNDS FOR ELEMENTARY AND SECONDARY EDUCATION -- A "MINIMUM FOUNDATION" OF FINANCIAL SUPPORT IS USUALLY GUARANTEED REGARDLESS OF THE LOCAL DISTRICT'S ABILITY TO SUPPORT EDUCATION (NOTE: PRIOR TO MAR80, THIS TERM WAS NOT SCOPED AND WAS SOMETIMES USED TO INDEX "PHILANTHROPIC FOUNDATIONS")

PHILANTHROPIC FOUNDATIONS
SN TRUSTS OR CORPORATIONS CREATED FOR CHARITABLE PURPOSES THAT PROVIDE GRANTS OF FUNDS TO FINANCE RESEARCH, SERVICES, FACILITIES, EQUIPMENT, OR LIBRARY RESOURCES (NOTE: PRIOR TO MAR80, THIS CONCEPT WAS OFTEN INDEXED UNDER "FOUNDATION PROGRAMS," WHICH WAS NOT SCOPED)

(d) Mandatory Leveling Terms

Scope Notes must account for Descriptors having any special roles or functions in ERIC indexing. The mandatory educational level Descriptors are intended to serve a "classing" function—to bring together all materials falling within a certain educational range. (See Section VII, item I.3.a.(1) of this manual.)

The use of these terms for this special function is at variance with the principle of indexing to the level of specificity of the document/article. One effect is their preponderant assignment as minor index terms. They are major index terms only when representing the subject of a document.

Because of their unique status, the mandatory educational level Descriptors are flagged within the body of the *Thesaurus* with a special instruction in the Scope Note, e.g.,

HIGHER EDUCATION
SN ALL EDUCATION BEYOND THE SECONDARY LEVEL LEADING TO A FORMAL DEGREE (NOTE: ALSO APPEARS IN THE LIST OF MANDATORY EDUCATIONAL LEVEL DESCRIPTORS)

(e) Descriptors Corresponding to Publication Type Categories

Certain Descriptors are sometimes used to index document characteristics other than subject content. Among these are the so-called "Publication Type" Descriptors that are frequently used to index document form, e.g., ABSTRACTS, CURRICULUM GUIDES, QUESTIONNAIRES.

Since mid-1974, however, ERIC has provided a special field for Publication Type tags. Wherever there is an exact match between one of the authorized Publication Type categories and a Descriptor, the Descriptor (as of March 1980) has been reserved for use only when indexing document subject, e.g.,

BIBLIOGRAPHIES

SN DESCRIPTIVE LISTS OF BOOKS OR OTHER PRINTED MATERIALS, WHICH ARE WRITTEN BY ONE AUTHOR, DURING ONE PERIOD, ON ONE SUBJECT, PRODUCED BY ONE PRINTER AND/OR PUBLISHER, OR LOCATED IN ONE PLACE (NOTE: CORRESPONDS TO PUBTYPE CODE 131 -- DO NOT USE EXCEPT AS THE SUBJECT OF A DOCUMENT)

TESTS

SN DEVICES, PROCEDURES, OR SETS OF ITEMS THAT ARE USED TO MEASURE ABILITY, SKILL, UNDERSTANDING, KNOWLEDGE, OR ACHIEVEMENT (NOTE: USE A MORE SPECIFIC TERM IF POSSIBLE -- THIS BROAD TERM CORRESPONDS TO PUBTYPE CODE 160 AND SHOULD NOT BE USED EXCEPT AS THE SUBJECT OF A DOCUMENT)

DOCTORAL DISSERTATIONS

SN THESSES SUBMITTED IN PARTIAL FULFILLMENT OF DOCTORAL DEGREE REQUIREMENTS (NOTE: CORRESPONDS TO PUBTYPE CODE 041 -- DO NOT USE EXCEPT AS THE SUBJECT OF A DOCUMENT)

The 22 Descriptors so limited are listed in the Introduction to the *Thesaurus* and are discussed in greater detail in Section VII, item I.3.d of this manual.

(f) Ambiguous Usage

Certain ERIC Descriptors have had such inconsistent usage over time as to have little value in retrieval. The postings level of some of these terms may be so large as to make reposting to other, more precise terms impractical.

As such terms are discovered and if it is determined that postings cannot be readily transferred, they are relegated to "dead" term status. In other words, they are qualified in the *Thesaurus* with birth/death dates, along with relatively standardized Scope Notes that lead users to other terminology.

EDUCATIONAL PROGRAMS (1966 1980)
SN INVALID DESCRIPTOR -- USED
INCONSISTENTLY IN INDEXING --
COORDINATE MORE SPECIFIC
DESCRIPTORS

(very broad term used
inconsistently in prior
years and therefore with
little apparent retrieval
value—further study may
show that most postings may
be purged without loss)

HISTORICAL CRITICISM (1969 1980)
SN INVALID DESCRIPTOR -- ORIGINALLY
INTENDED AS A LITERARY TERM, BUT
USED INCONSISTENTLY IN INDEXING
-- SEE "LITERARY CRITICISM" AND
APPROPRIATE "HISTORY" TERM(S) FOR
THIS CONCEPT -- SEE ALSO
"LITERARY HISTORY" OR
"HISTORIOGRAPHY"

(indiscriminate usage of this
term was caused by "word
indexing"—postings need to
be examined individually to
determine potential value)

SELF EVALUATION (1966 1980)
SN INVALID DESCRIPTOR -- USED FOR
PERSONAL, ORGANIZATIONAL, OR
PROGRAM SELF EVALUATION -- SEE
"SELF EVALUATION (INDIVIDUALS)"
AND "SELF EVALUATION (GROUPS)"
RESPECTIVELY FOR THESE CONCEPTS

(heavily posted term with two
meanings, which need to be
distinguished—every usage
will most likely need to be
reposted to one of two
preferred Descriptors)

Retrieval considerations occasionally necessitate a cross-reference in the Scope Notes of preferred terms back to "dead" terms. ("Dead" terms carry no standard *Thesaurus* cross-references, i.e., NTs, BTs, and RTs.)

AMERICAN HISTORY (1966 1980)
SN INVALID DESCRIPTOR -- ALTHOUGH
SCOPE NOTE REFERRED TO NORTH,
SOUTH, AND CENTRAL AMERICA, TERM
USED FREQUENTLY FOR U.S. HISTORY -
- SEE "NORTH AMERICAN HISTORY,"
"LATIN AMERICAN HISTORY," OR
"UNITED STATES HISTORY"

UNITED STATES HISTORY
SN (NOTE: PRIOR TO MAR80, "AMERICAN
HISTORY" WAS OCCASIONALLY USED
FOR THIS CONCEPT)

(g) Dates Appearing in Instructional Scope Notes

Dates in instructional Scope Notes reflect the calendar month/year of particular *Thesaurus* updates or changes and do not refer to RIE and CIJE issues. *Thesaurus* updates usually occur from 1 to 2 months in advance of RIE/CIJE issues; however, on occasion, they may occur up to 6 months ahead of these publications. Therefore, searchers must assume that a given change may not have been effective in RIE or CIJE for up to 6 months after a Scope Note's calendar date. For that 6-month period, searchers should consider and employ both the old (pre-change) way of indexing and the new way of indexing.

e. UF (Used For)/USE References

(1) General

The UF and USE references are generally employed to solve problems of synonymy occurring in natural language. Terms following the UF notation are synonyms or variant forms of so-called main terms or postable Descriptors. These synonyms or quasi-synonyms, also known as non-preferred terms, are not used in indexing or searching; their listing merely provides a pathway to the preferred terms in the *Thesaurus*. They thus serve as the access vocabulary, i.e., they represent various points of entry that users (both indexers and searchers) are likely to try. Ideally, there should be as many entry points for a given concept as there are ways to describe that concept.

The importance of the UF notation extends beyond the clear-cut case of synonymy. The notation can represent the relationship to a Descriptor of a near synonym that has a general conceptual similarity, but that is not a true synonym, and it may also be used to indicate highly specific terms that, for the purposes of storage and retrieval, are indexed under a more general term.

UFs are entered in the *Thesaurus* as cross-references to main terms, e.g.,

LABOR
UF MANPOWER

GRADES (SCHOLASTIC)
UF MARKS (SCHOLASTIC)

For each UF entered in this manner, the ERIC *Thesaurus* software automatically generates a reciprocal USE reference. (USE references cannot be added directly to the *Thesaurus*; they appear only as a reciprocal result of the generation of UFs.) The reciprocals of the above UFs are:

MANPOWER
USE LABOR

MARKS (SCHOLASTIC)
USE GRADES (SCHOLASTIC)

These reciprocals are mandatory. They refer the *Thesaurus* user from a non-postable or non-indexable term to the preferred, indexable term or terms.

(2) Summary of Approved Functions for USE References

- (a) To refer from synonyms and variant word forms to the preferred form established as the main term. "Synonym" must be understood to mean synonymous for the purposes of retrieval in ERIC. Distinctions made in the literature and in authorities are not important if they do not hold up from the point of view of retrieval.

SIGHT USE VISION	HOKKU USE HAIKU	SUBJECT ACCESS USE INDEXING	ABUSED CHILDREN USE CHILD ABUSE	DEATH EDUCATION USE DEATH
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- (b) To refer from a highly specific term to a more general term (posting up), including bringing together the points in a conceptual continuum.

LEGAL SECRETARIES USE SECRETARIES	GAS WELDING USE WELDING	EARLY DETECTION USE IDENTIFICATION
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- (c) To refer from a commonly accepted acronym or abbreviation to its full form.

ITA USE INITIAL TEACHING ALPHABET	LRC USE LEARNING RESOURCES CENTERS
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- (d) To refer from a colloquial term to its scientific or technical equivalent, or from a scientific or technical term to its commonly used equivalent.

CROSS EYES USE STRABISMUS	CYESIS USE PREGNANCY
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- (e) To refer from older to current terminology.

NEGROES (1966 1977) USE BLACKS

- (f) To refer from an antonym when distinctions between opposites are determined to be unimportant for ERIC retrieval.

DEHUMANIZATION
USE HUMANIZATION

MALNUTRITION
USE NUTRITION

- (g) To prescribe simultaneous use of more than one term to express a concept.

FATHER ROLE
USE FATHERS
and PARENT ROLE

- (h) To refer from a deleted main term to the main term(s) to which the older postings have been transferred.

COLLECTIVE NEGOTIATION (1967
1977)
USE COLLECTIVE BARGAINING

(3) Rules for USE References

The phrase "USE reference" and the abbreviation "UF" represent reciprocal references to and from the same entity, a non-postable *Thesaurus* term, and the two are often used interchangeably in the following discussion, depending on the point being made.

UF construction follows the rules for the construction of main terms (see item C.2.b.(3) of this section), including:

- UFs are limited to 50 characters, including blanks.
- Only noun and noun phrases should be used for UFs.
- Parentheses () are the only punctuation allowed in UFs.

The following additional rules also apply:

- (a) UFs may refer laterally or upward, but never downward, i.e., never from a broader concept to a narrower, more specific concept.

- (b) UFs must bear the same relationship to the hierarchy (BTs/NTs) of a main term as does the main term itself—except where a UF, conceptually bearing an RT relationship to the main term, is being treated as synonymous for the purposes of retrieval.
- (c) UFs must bear the same relationship to the RTs of the main term as does the main term itself.
- (d) UFs are restricted to useful entry points—those for which there is good probability of use.
- (e) All entry points likely as user approaches to a concept should be included as UFs in the *Thesaurus*.

(4) Evaluation and Decision Criteria for USE References

(a) Relationship Between UF and Main Term

The relationship between a UF and its main term should normally be either synonymous or hierarchical.

• Testing for Synonymy

Synonyms can be tested by inserting the words "is always" or "are always" between the two terms. The relationship should be true in both directions. Examples:

[UF] is always [main term]
 [main term] is always [UF]

SELF DISCIPLINE
 USE SELF CONTROL

SELF DISCIPLINE is always SELF CONTROL
 SELF CONTROL is always SELF DISCIPLINE

MINORITY CULTURE
 USE MINORITY GROUPS

MINORITY CULTURE is always MINORITY GROUPS
 MINORITY GROUPS are always MINORITY CULTURE

VILLAGE WORKERS
 USE CHANGE AGENTS

VILLAGE WORKERS are always CHANGE AGENTS
 CHANGE AGENTS are always VILLAGE WORKERS

— If the test holds true in both directions, the terms are synonymous.

— If the terms do not meet the test of "always" in both directions, but do meet the test of "usually" or "frequently," they are near-synonyms. Then the criterion is whether they are synonymous for the purposes of retrieval from the ERIC data base. For example, SELF DISCIPLINE and SELF CONTROL are not identical, but are very nearly so:



- If the UF term were also established as a main term, would the postings on the two terms be distinguishable?
- Would searchers frequently want one concept but not the other?

If the answers to these questions are negative, then the terms are essentially synonymous and the UF term is appropriate.

- If the two terms meet the test of "always" only in the direction "UF is always main term," then the relationship is hierarchical and legitimate.
- If the two terms meet the test of "sometimes" in one or both directions, e.g., CHANGE AGENTS are sometimes VILLAGE WORKERS, then there may be a hidden hierarchical relationship that could be expressed in a new pre-coordination: VILLAGE [or rural] CHANGE AGENTS Use CHANGE AGENTS.

• Testing for Hierarchy

Hierarchically related UFs can be similarly tested by inserting the words "kind(s) of" or "specific application of" between the two terms. The relationship will hold true in one direction. Examples:

[UF] are kinds of [main term]
 [main term] are kinds of [UF]

GRANDFATHERS
 USE GRANDPARENTS

GRANDFATHERS are kinds of GRANDPARENTS (true)
 GRANDPARENTS are kinds of GRANDFATHERS (false)

FAILURE
 USE ACADEMIC FAILURE

FAILURE is a kind of ACADEMIC FAILURE (false)
 ACADEMIC FAILURE is a kind of FAILURE (true)

GRAIN MARKETING
 USE GRAINS (FOOD)

GRAIN MARKETING is a specific application of GRAINS (FOOD) (true)
 GRAINS (FOOD) is a specific application of GRAIN MARKETING (false)

- If the test holds true from UF to main term, the relationship is upward and legitimate.
- If the test holds true from main term to UF, the relationship is downward and violates the rules for UFs. Such errors can be remedied by qualifying the UF, e.g., FAILURE (SCHOLASTIC).

—If the test does not hold true in either direction, the relationship is an RT relationship and violates the rules. However, it should be remembered that such relationships may exist whenever the concepts are judged to be sufficiently synonymous for searching purposes. (For a brief discussion of these RT relationships, see "Special Problems in Meaning and Usage" below, item "(e).")

(b) Relationship Between UF and Rest of Cross-Reference Structure

The BTs, NTs, and RTs of a main term should normally have the same relationship to a UF of the main term as they do to the main term itself.

Examples:

FILMS		
UF	BLACK AND WHITE FILMS CINEMA COLOR FILMS MOTION PICTURES SILENT FILMS SOUND FILMS (1966 1980)	(UFS are appropriate to NTs and BTs)
NT	FOREIGN LANGUAGE FILMS INSTRUCTIONAL FILMS KINESCOPE RECORDINGS SINGLE CONCEPT FILMS	
BT	MASS MEDIA NONPRINT MEDIA VISUAL AIDS	
RT	AUTEURISM CAPTIONS CARTOONS COPYRIGHTS DOCUMENTARIES FILM CRITICISM FILM INDUSTRY FILM LIBRARIES FILMOGRAPHIES FILM PRODUCTION FILMSTRIPS FILM STUDY LITERARY STYLES PHOTOGRAPHS POPULAR CULTURE REPETITIVE FILM SHOWINGS THEATER ARTS TRANSPARENCIES VIDEOTAPE RECORDINGS	

DISARMAMENT		
UF	ARMS CONTROL MULTILATERAL DISARMAMENT NUCLEAR CONTROL UNILATERAL DISARMAMENT	(UFS are appropriate to the RTs)
RT	ARMED FORCES CONFLICT INTERNATIONAL RELATIONS MILITARY SCIENCE NATIONAL DEFENSE NUCLEAR WARFARE PEACE WAR WORLD PROBLEMS	

(c) Usefulness of UF as an Access Point

The access point provided by the UF should be genuinely useful, i.e.,

- there should be a good possibility that users of the *Thesaurus* might actually approach the concept via the UF's terminology; and
- the UF's terminology should be found in the literature and in relatively common discourse.

Example:

FASHION INDUSTRY
SN CONCERNED WITH THE DESIGN, PRODUCTION, AND MARKETING OF CLOTHING
UF APPAREL INDUSTRY CLOTHING INDUSTRY GARMENT INDUSTRY
BT INDUSTRY
RT CLOTHING CLOTHING DESIGN CLOTHING INSTRUCTION NEEDLE TRADES OCCUPATIONAL HOME ECONOMICS SERVICE OCCUPATIONS SEWING INSTRUCTION SEWING MACHINE OPERATORS TEXTILES INSTRUCTION

(d) Need for UF as an Access Point

The need for additional UFs or access points can be tested as follows:

- Check the *Rotated Display* under the key component words of the main term to see the surrounding "terminology terrain." Determine whether UFs from and to those words point to other words that meet the test for synonymity or near-synonymity. Any identifiable patterns of references not already provided for in the Descriptor's UFs should be added.

In the example below, the adjective "occupational" of the 2-word Descriptor OCCUPATIONAL TESTS is viewed in the context of the Rotated Display. Alternative words (such as "JOB," "VOCATIONAL," "CAREER," "EMPLOYMENT") that should be considered as additional access points are easily seen.

ALPHABETICAL DISPLAY

OCCUPATIONAL TESTS

SN TESTS DESIGNED TO PREDICT JOB
PERFORMANCE BY RECORDING SPECIFIC
ABILITIES AND INTERESTS THAT
CORRESPOND WITH THOSE OF PERSONS
SUCCESSFULLY ENGAGING IN THE
PARTICULAR FIELD OF WORK (NOTE:
FOR OCCUPATIONAL INTEREST
INVENTORIES, USE "INTEREST
INVENTORIES")
UF ADMISSION TESTS (OCCUPATIONAL)
EMPLOYMENT TESTS
PERSONNEL TESTS
VOCATIONAL TESTS
NT WORK SAMPLE TESTS
BT TESTS
RT APTITUDE TESTS
CAREER COUNSELING
EMPLOYMENT QUALIFICATIONS
INTEREST INVENTORIES
JOB PERFORMANCE
JOB SKILLS
MATURITY TESTS
PERFORMANCE TESTS
PERSONNEL EVALUATION
PREDICTIVE MEASUREMENT
VOCATIONAL APTITUDE
VOCATIONAL INTERESTS

ROTATED DISPLAY

OCCUPATIONAL ADJUSTMENT Use VOCATIONAL ADJUSTMENT
ADMISSION TESTS (OCCUPATIONAL) Use OCCUPATIONAL TESTS
OCCUPATIONAL ANALYSIS Use JOB ANALYSIS
OCCUPATIONAL ASPIRATION
OCCUPATIONAL ASPIRATION LEVEL Use OCCUPATIONAL ASPIRATION
OCCUPATIONAL AWARENESS Use CAREER AWARENESS
OCCUPATIONAL CHOICE (1966 1980) Use CAREER CHOICE
OCCUPATIONAL CLUSTERS
OCCUPATIONAL COUNSELING Use CAREER COUNSELING
OCCUPATIONAL DISEASES
OCCUPATIONAL EXPLORATION Use CAREER EXPLORATION
OCCUPATIONAL FAMILIES Use OCCUPATIONAL CLUSTERS
OCCUPATIONAL FOLLOWUP Use VOCATIONAL FOLLOWUP
OCCUPATIONAL GUIDANCE (1966 1980) Use CAREER GUIDANCE
OCCUPATIONAL HOME ECONOMICS
OCCUPATIONAL INFORMATION
OCCUPATIONAL LEVEL Use EMPLOYMENT LEVEL
OCCUPATIONAL MOBILITY
PROMOTION (OCCUPATIONAL)
OCCUPATIONAL SATISFACTION Use JOB SATISFACTION
OCCUPATIONAL SUCCESSION Use OCCUPATIONAL MOBILITY
OCCUPATIONAL SURVEYS
OCCUPATIONAL TESTS
OCCUPATIONAL THERAPISTS
OCCUPATIONAL THERAPY
OCCUPATIONAL THERAPY ASSISTANTS
OCCUPATIONAL TRAINING Use JOB TRAINING

- Make sure that access is provided from important key words in the main term (or perhaps in the Scope Note), e.g.,

FEAR OF SUCCESS
 SN NEED TO REFRAIN FROM MAXIMALLY UTILIZING ONE'S ABILITIES IN ACHIEVEMENT SITUATIONS BECAUSE OF EXPECTED NEGATIVE CONSEQUENCES
 UF SUCCESS AVOIDANCE
 BT FEAR
 RT ACHIEVEMENT
 FAILURE
 GOAL ORIENTATION
 INHIBITION
 LOW ACHIEVEMENT
 MOTIVATION
 SEX ROLE
 SUCCESS
 UNDERACHIEVEMENT

PRETEND PLAY
 SN PLAY INVOLVING FANTASY OR MAKE BELIEVE
 UF FANTASY PLAY
 MAKE BELIEVE PLAY
 BT PLAY
 RT BEHAVIOR DEVELOPMENT
 BEHAVIOR PATTERNS
 FANTASY
 IMAGINATION
 IMITATION
 ROLE PLAYING

- Check titles of documents and articles posted to the main term for clues about alternate word forms and terminology.

FUTURES (OF SOCIETY)
 UF ALTERNATIVE FUTURES
 FUTURE STUDIES
 FUTURISM
 FUTURISTICS
 FUTUROLOGY
 RT CULTURE LAG
 DECISION MAKING
 LONG RANGE PLANNING
 PLANNING
 PREDICTION
 PUBLIC POLICY
 RELEVANCE (EDUCATION)
 REVOLUTION
 SOCIAL CHANGE
 SOCIAL INDICATORS
 TECHNOLOGICAL ADVANCEMENT
 TREND ANALYSIS
 VALUES
 WORLD AFFAIRS

Futures (of Society)
 Alternative Images of the Future: Scenarios for Education and the Preparation of Teachers. Conference Proceedings.

ED 181 015

Alternative Scenarios of the American Future: 1980-2000.

ED 176 037

America o Aztlan? Los Chicanos En El Ano 2001 (America or Aztlan? Chicanos in the year 2001).

ED 178 247

Article Booklet for the Eleventh Course by Newspaper Connections: Technology and Change.

ED 182 212



A Futures Curriculum for Symmetry.

ED 180 906

Future Studies in the K-12 Curriculum.

ED 180 859

Future Tense: A Workbook for Planning the Use of Land.

ED 176 943

Future Trends in Education Policy.

ED 177 665//

Futurism: Framework for Composition.

ED 179 980

Futuristic Forecasting: Calculated Curriculum Relevance (Using the Methods of the Futurist as a Forecasting Technique).

ED 175 804

Futuristic Images of Guidance and Student Services.

ED 181 400

Futuristics and Education: An ASCD Task Force Report. Professional Paper, 1979-1.

ED 178 354

Futuristics and Education. Fastback 131.

ED 178 398

General Education for the Too Late Generation.

ED 180 569



- Make sure that access is provided for embedded concepts in any compound words in the main term, e.g., COLLEGE COOPERATION, in the case below:

INTERCOLLEGiate COOPERATION
 SN COOPERATION BETWEEN OR AMONG
 COLLEGES, UNIVERSITIES, OR
 PROFESSIONAL SCHOOLS
 UF COLLEGE COOPERATION (1966 1980)
 INTERCOLLEGiate ATHLETICS #
 INTERCOLLEGiate PROGRAMS (1967
 1980)
 BT INSTITUTIONAL COOPERATION
 RT ARTICULATION (EDUCATION)
 COLLEGE PLANNING
 COLLEGES
 COLLEGE SCHOOL COOPERATION
 CONSORTIA
 EDUCATIONAL COOPERATION

(5) Special Problems in Meaning and Usage

(a) Filing Order/Filing Distance

The requirements for effective access to the vocabulary vary in different alphabetical sections of the *Thesaurus*. Provision of UFs that have the same first word as the main term is unnecessary if they will file in close proximity to the main term, and if the possibility of additional intervening references and displays appears small. Similarly, several UFs referring to the same Descriptor are redundant if they will file together, whether or not they will appear adjacent to the main term. However, in core areas of the *Thesaurus*, such as the "school" terms, the "student" terms, etc., UFs beginning with the same word, or beginning with the same word as the main term, may nevertheless file at a substantial distance from each other. These references may be vital, e.g.,

SCHOOL PERSONNEL
 UF SCHOOL EMPLOYEES
 SCHOOL OFFICIALS

A further consideration in determining the usefulness of additional references of this type is the effect of the 1980-81 conversion of *Thesaurus* filing from letter-by-letter to word-by-word. In old letter-by-letter filing, certain USE references would file immediately before or after their respective main terms, and the chances were remote that new entries would fall between them. The following two sets illustrate this situation:

**AUTO MECHANICS
UF AUTOMOBILE MECHANICS**

SOCIALIZATION OF SOCIAL LEARNING

AUTOMOBILE MECHANICS USE AUTO MECHANICS

SOCIAL LEARNING USE SOCIALIZATION

With the advent of word-by-word filing, however, many entries now intervene between these sets of terms and the importance of having the USE references is more pronounced.

(b) Error of "Mixed Signals"

Confusion can occur when UFs are considered only from the point of view of the main term. In evaluating UFs and in judging their correctness, it is imperative to consider them not only in the Main Term display but also—

- at the place where they file reciprocally

**GUIDANCE SPECIALISTS
USE GUIDANCE PERSONNEL**

GUIDANCE WORKERS USE COUNSELORS

- under each word in the rotated display

TEACHER COMPETENCY USE TEACHER QUALIFICATIONS

TEACHER QUALITY USE TEACHING QUALITY

TEACHER EFFECTIVENESS USE EFFECTIVE TEACHING

The above examples of "mixed signals" existed in the pre-1980 *Thesaurus*.

The situation illustrated by the first example was particularly confusing because COUNSELORS was (and is) a Narrower Term of GUIDANCE PERSONNEL. This error was corrected in three steps:

- Deleting GUIDANCE WORKERS as a UF.
 - Clarifying GUIDANCE SPECIALISTS with a double USE reference.

**GUIDANCE SPECIALISTS
USE GUIDANCE PERSONNEL
and SPECIALISTS**

—Adding a historical note to the Scope Note of
GUIDANCE PERSONNEL.

GUIDANCE PERSONNEL
SN PROFESSIONALS ENGAGED IN
ASSISTING INDIVIDUALS AND GROUPS
TO DEVELOP REALISTIC AND
SATISFYING PLANS, GOALS, AND
ACTIVITIES (NOTE: PRIOR TO MAR80,
THE INSTRUCTION "GUIDANCE
WORKERS, USE COUNSELORS" WAS
CARRIED IN THE THESAURUS)

The mixed signals among the above "teacher" term examples were repaired with the following two displays:

TEACHER EFFECTIVENESS
SN DEGREE TO WHICH TEACHRS ARE
SUCCESSFUL IN SATISFYING THEIR
OBJECTIVES, OBLIGATIONS, OR
FUNCTIONS
UF EFFECTIVE TEACHING (1966 1980)
TEACHER QUALITY
TEACHING QUALITY (1966 1980)
BT TEACHER BEHAVIOR
RT EDUCATIONAL QUALITY
INSTRUCTIONAL IMPROVEMENT
INSTRUCTIONAL INNOVATION
STUDENT EVALUATION OF TEACHER
PERFORMANCE
TEACHER EVALUATION
TEACHER INFLUENCE
TEACHER ROLE
TEACHERS
TEACHING (OCCUPATION)
TEACHING SKILLS
TEACHING STYLES

TEACHER QUALIFICATIONS
SN ONE'S EDUCATION, EXPERIENCE, AND
PHYSICAL, SOCIAL, AND MENTAL
CHARACTERISTICS THAT DETERMINE
FITNESS FOR A TEACHING POSITION
BT QUALIFICATIONS
RT EMPLOYMENT QUALIFICATIONS
TEACHER BACKGROUND
TEACHER CERTIFICATION
TEACHER CHARACTERISTICS
TEACHER EDUCATION
TEACHER EDUCATION CURRICULUM
TEACHER EVALUATION
TEACHERS
TEACHER SELECTION
TEACHING (OCCUPATION)
TEACHING EXPERIENCE

(Note: No reference was found to be necessary to the old UF TEACHER COMPETENCY since a postings check showed it to have no impact on the earlier use of TEACHER QUALIFICATIONS.)

(c) Precoordinated Upward UFs

Upward UF references cause no problem as single-word or multiword constructions that directly parallel the words or component concepts of a main term.

ADHESIVES
UF CEMENTS (ADHESIVES)
GLUES
PASTES (ADHESIVES)
SEALANTS
STICKERS

NONTRADITIONAL EDUCATION
SN EDUCATIONAL PROGRAMS THAT ARE
OFFERED AS ALTERNATIVES WITHIN OR
WITHOUT THE FORMAL EDUCATIONAL
SYSTEM AND PROVIDE INNOVATIVE AND
FLEXIBLE INSTRUCTION, CURRICULUM,
GRADING SYSTEMS, OR DEGREE
REQUIREMENTS
UF ALTERNATIVE EDUCATION
ALTERNATIVE SCHOOLS (1972 1980)
EDUCATIONAL ALTERNATIVES (1974 1980)
EDUCATIONAL CHOICE
INSTRUCTIONAL ALTERNATIVES
TEACHING ALTERNATIVES
TRAINING ALTERNATIVES

(Note: The qualifier "adhesives" was necessary in two instances of the first example to avoid so-called "downward" UFs (i.e., from a broader to a narrower concept); downward UFs are serious errors in the "terminology terrain" of a thesaurus.)

However, precoordinated upward UFs that add a new concept, one not directly related to the component concepts of a main term, can cause confusion when they are interpreted too "literally" by indexers and searchers. This problem can best be illustrated with an example.

ACADEMIC ENRICHMENT (1966 1980)
USE ENRICHMENT

ENRICHMENT
UF ACADEMIC ENRICHMENT (1966 1980)
ENRICHMENT EXPERIENCE (1966 1980)
NT CULTURAL ENRICHMENT
CURRICULUM ENRICHMENT
JOB ENRICHMENT
LANGUAGE ENRICHMENT
MATHEMATICAL ENRICHMENT
RT ENRICHMENT ACTIVITIES

As of 1980, the *Thesaurus* says "ACADEMIC ENRICHMENT, Use ENRICHMENT." (ACADEMIC ENRICHMENT is a former main term.) Beyond the literal command to "use ENRICHMENT," this instruction does two other things:

- It gives the user access to the "terminology terrain" of the word "academic." If one takes the USE reference too literally and uses ENRICHMENT only, access via the word "academic" could be lost. Depending on the document being indexed or the search strategy being formulated, this may or may not be important. Only the indexer or searcher can decide, based upon the particular circumstances of the document being indexed or his/her retrieval needs, whether access via the word "academic" is necessary.
- It leads the user to a display where more specific or precise terminology may be found, including, quite possibly, a more suitable term for the particular document or search strategy. Again, if the user takes the USE reference literally, ENRICHMENT will be used, possibly in lieu of more appropriate terms, e.g., CURRICULUM ENRICHMENT.

(Note: Access under ENRICHMENT is not lost if CURRICULUM ENRICHMENT is used, certainly not in online retrieval with its word searching capability, but neither in manual searching if users are trained to properly use the *Thesaurus*.)

A USE reference specifies that Term "A" is not a postable concept for the ERIC indexes and that Term "B" (and sometimes Term "C") will be used instead, providing there are no contravening considerations. Thus, the indexing or searching process does not necessarily stop with the use or posting of Term "B." Users should remember that the *Thesaurus* is an access vocabulary, and that USE references merely provide a pathway to the most probable term that one might wish to use. Indexing decisions or search strategies should never be based rigidly on a USE reference alone. Before making a final decision, users should examine the surrounding "terminology terrain" and then proceed to the main term display to which a USE reference leads. To do otherwise is to engage in mere "word indexing" and defeats the utility of a structured vocabulary.

(d) Inverted Entries or Term Reversals

An early rule with respect to ERIC *Thesaurus* development specifically prohibited the use of inverted entries in cross-referencing. The reasoning behind the rule was that the Rotated Descriptor Display provides access to all words of a multiword Descriptor.

A plethora of inverted entries, of course, would be undesirable, and over the years, this rule has been followed with only rare exceptions. Some examples of inverted entries that presently exist in the *Thesaurus* are:

BATTERIES (ELECTRIC)	DIAGNOSIS	DISCRIMINATION (SOCIAL)
USE ELECTRIC BATTERIES	USE IDENTIFICATION	USE SOCIAL DISCRIMINATION
	DIAGNOSIS (CLINICAL)	
	USE CLINICAL DIAGNOSIS	
	DIAGNOSIS (EDUCATIONAL)	
	USE EDUCATIONAL DIAGNOSIS	

Justification for the "batteries" and "discrimination" reversals is a need for access at the most logical, or commonly thought of, point of entry. Support for the "diagnosis" entries is based on a perceived need to lessen indexer/searcher confusion and eliminate any possibility of term misuse.

It should be emphasized, however, that inverted entries are generally discouraged and that special demonstrable circumstances are necessary to justify them.

(e) Related-Term Type of Relationship Between a Main Term and the UF Leading To It

A main term and a UF leading to it may have the same conceptual relationship between them as two Related Terms (RTs).

Such relationships will often be precoordinated upward UFs. In the case of "GRAIN MARKETING, Use GRAINS (FOOD)," the UF is hierarchically related to the main term MARKETING and has an RT relationship to GRAINS (FOOD). The usefulness of the UF GRAIN MARKETING is strictly in preventing the concept's use as an Identifier and requiring that the more general term be used. Confusion over what to do about "marketing" in this instance can be avoided if one remembers to not take the UF "literally." MARKETING or another term to convey this aspect of the document can and should be used also, if warranted.

UF/main term RT relationships between population concepts and "condition" concepts occasionally cause confusion as well. For instance, the *Thesaurus*

instruction "VISUALLY HANDICAPPED, Use VISUAL IMPAIRMENTS" may be difficult to accept. However, experience shows that any differences that may exist between such terms cannot be consistently articulated in the indexing process.

(f) Colloquialisms

Slang and colloquialisms are ordinarily not used as UFs, particularly when the terminology of the main term is commonly known and widely used, e.g.,

MARY JANE (DRUG) STRAW BOSSSES
USE MARIHUANA USE CREW LEADERS

Alternatives to some colloquial expressions, however, may not come readily to mind. Such expressions may be needed for additional access, e.g.,

BREADWINNERS
USE HEADS OF HOUSEHOLDS

(g) Transferred Descriptors

A former indexable or main term that has been downgraded to the status of a UF term is accompanied by a "life span" notation in parentheses, e.g., "(1966 1974)." Former Descriptors displayed as UFs are no longer carried in the ERIC files, i.e., their postings have been transferred to the preferred USE term(s). Thus, the "life span" notation indicates the span of time in which a term was used in indexing and provides useful information for manually searching older index bulletins and for machine searching older tape files that have not been revised with the latest postings changes.

Examples:

PERSONAL RELATIONSHIP (1966 1974) STUDENT TESTING (1966 1980)
USE INTERPERSONAL RELATIONSHIP USE EDUCATIONAL TESTING

An additional parenthetical qualifier accompanies certain transferred Descriptors that, because of their unusual original wording, would appear out-of-place or even erroneous if not qualified in their new roles as UFs.

Example:

PROGRESSIVE RETARDATION (1966
1980) (IN SCHOOL)
USE EDUCATIONALLY DISADVANTAGED

Transferred Descriptors whose postings have been
split two ways are qualified in the same manner.

Example:

PAINTING (1966 1980) (ARTISTIC) PAINTING (1966 1980) (INDUSTRIAL)
USE PAINTING (VISUAL ARTS) USE PAINTING (INDUSTRIAL ARTS)

(This situation is not to be confused with
Descriptors whose postings were each transferred
to two other Descriptors and are now "double UFs"—
See next section.) The qualifiers in the above
examples were not attached to the original Descriptors;
therefore, they follow the life span notations.
Qualifiers that were part of original Descriptors
precede the life span notations.

Example:

CARDIAC (PERSON) (1968 1980)
USE HEART DISORDERS

(h) Multiple UFs

The multiple USE reference capability allows
for the specification of a concept by up to five
term coordinations.

A pound sign (#) following a UF term signifies
that two or more main terms are to be used in
coordination to represent that UF.

Example:

ATHLETICS
SN SPORTS, GAMES, OR PHYSICAL
CONTESTS OFTEN ENGAGED IN
COMPETITIVELY
UF ATHLETIC ACTIVITIES (1966 1974)
ATHLETIC PROGRAMS (1966 1980)
INTERCOLLEGIATE ATHLETICS #
SPORTS
SPORTS NEWS #
SPORTS REPORTING #

Each page where the pound sign appears in the *Thesaurus Alphabetical Display* is accompanied by a footnote warning users that at least two terms are required to retrieve the concept. This footnote reads as follows:

- TWO OR MORE DESCRIPTORS ARE USED TO REPRESENT THIS TERM.
THE TERM'S MAIN ENTRY SHOWS THE APPROPRIATE COORDINATION.

To determine the proper coordination for a multiple UF, the user needs only to consult the UF's reciprocal USE reference (i.e., main entry) in the *Alphabetical Display*. The reciprocals or main entries for the three UFs given above would be:

INTERCOLLEGIATE ATHLETICS USE ATHLETICS and INTERCOLLEGIATE COOPERATION	SPORTS NEWS USE ATHLETCS and NEWS MEDIA	SPORTS REPORTING USE ATHLETICS and NEWS REPORTING
---	---	---

Multiple UFs should not be used for concepts having high search interest. Direct and specific Descriptors are most necessary and desirable in areas of high search interest, to ensure ease and precision for manual retrieval.

Many existing multiple UFs reflect former precoordinated main terms that had low utility and whose postings were transferred to two broader terms.

Example:

REMEDIAL ARITHMETIC (1966 1980)
USE ARITHMETIC
and REMEDIAL MATHEMATICS

Users should be cautioned to be flexible in their use and interpretation of multiple UFs. Like other UFs, multiple UFs can sometimes be taken too "literally." For instance, one of the multiple UFs illustrated above says:

SPORTS NEWS, Use ATHLETICS and NEWS MEDIA

ATHLETICS has many narrower terms or NTs, one of which is FOOTBALL. NEWS MEDIA also has some NTs, including NEWSPAPERS. Remembering ERIC's policy to index to the most specific available Descriptor, the concept "football news" should obviously be indexed with FOOTBALL and NEWS MEDIA, not also

with ATHLETICS. For the even narrower concept "football newspapers," NEWSPAPERS should be used, not NEWS MEDIA.

(i) Disallowance of UFs as Postable Terms

UFs are never to be used as index postings in ERIC records, either in the Descriptor field or as Identifiers.

Any indexer or user who disagrees with a UF, and can see a need to post it, should request a *Thesaurus* change via the procedures in item E.5.d. Reasons for requesting such a change would include:

- A broad Descriptor is continually being posted for documents that really pertain to the more specific subject of a UF.
- An outmoded Descriptor is being posted for more contemporary terminology represented by a UF.
- A Descriptor is being misused for different subjects because of a broad or otherwise inappropriate UF.

All errant UFs should, of course, be removed from the *Thesaurus*. UFs so removed would then be acceptable for posting.

f. Narrower Terms/Broader Terms

(1) General

Narrower Term/Broader Term (NT/BT) notations are used to indicate hierarchical relationships among Descriptors. Because they are Descriptors, NTs and BTs are indexable and searchable. More than any other feature, hierarchies distinguish a systematic thesaurus from other organized lists of terms. They provide the capability for fine-tuning the indexing and searching processes to the most appropriate level of subject specificity.

Hierarchical relationships are structured using the taxonomic concept of "class membership." Placement of terms within hierarchies helps to define the terms and limits their possible indexing and searching applications.

Narrower Terms represent concepts totally included in the broader class listed above them in the hierarchy.

Example: READING
NT ORAL READING
SILENT READING

Broader Terms include as a subclass each concept represented by a Narrower Term in the hierarchy.

Examples: ORAL READING
BT READING

SILENT READING
BT READING

BTs and NTs have a mandatory reciprocal relationship. Sometimes a term may have more than one Broader Term.

Example: MIGRANT CHILDREN
BT CHILDREN
MIGRANTS

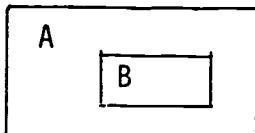
(2) Generic Structuring

Generic structuring involves organizing Descriptors into "hierarchical families." A single hierarchical family is made up of a class or category of concepts and each of its members. Thus, the relationship is the same as that between a thing and its types, or, in zoological terms, a genus and its member species. In ERIC, and many other contemporary information systems, this is the BT/NT relationship.

(a) BT/NT Relationship

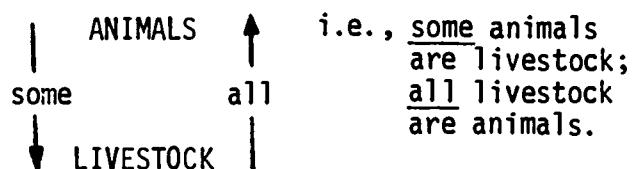
ERIC Descriptors are names (or tags) for classes of information, and a NARROWER TERM of a given Descriptor is simply a subclass within the scope of that given Descriptor, as illustrated below:

Example 1:



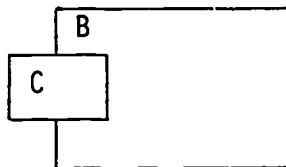
If A and B represent terms in the *Thesaurus*, then B is a narrower term to Term A, because all members of the class represented by Term B are also members of the class represented by Term A. The corresponding reciprocal statement is, of course, that Term A is a broader term to Term B because, while it has members which are not members of Term B, it does include all members of Term B.

The so-called "all-and-some test" is useful in determining whether terms are related in this manner. In one of the ERIC hierarchies, using Example 1, A = ANIMALS and B = LIVESTOCK. The BT/NT relationship of these terms passes the test as represented by the following diagram:



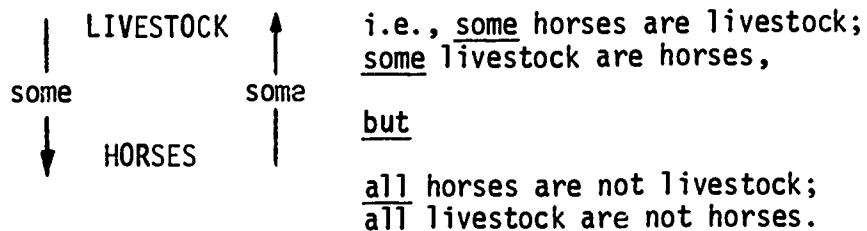
On the other hand, two terms where each has only some members in common with the other (i.e., a class overlap) would be illustrated as follows:

Example 2:



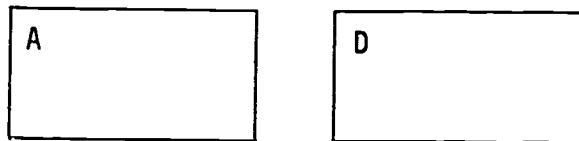
In this example, Term C is not a narrower term to Term B, nor is Term B a broader term to Term C, because although the terms have members in common, all of the members of Term C are not also members of Term B.

Example 2 can be illustrated with the ERIC terms LIVESTOCK (= B) and HORSES (= C). Using the "all-and-some test":



Two terms representing totally different types of things such as actions, objects, properties, fields of study, etc., obviously cannot pass the "all-and-some test" and, therefore, cannot logically be hierarchical.

Example 3:

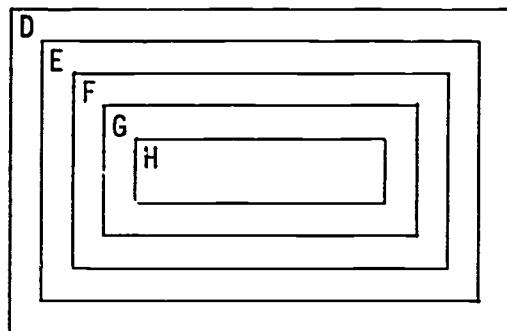


A pair of terms such as ANIMALS and ANIMAL HUSBANDRY, or HORSES and HORSEBACK RIDING, may be considered associated, but not associated hierarchically. (For "associative relationships," see section on "Related Terms.")

(b) Hierarchical Levels and Branches

There can be many levels in a hierarchy, as in the following example:

Example 4:



Term F lies in the middle of this hierarchy with two broader terms and two narrower terms. These levels would appear in the *Thesaurus Alphabetical and Hierarchical Displays* like this:

Alphabetical Display

Term F
NT Term G
BT Term E

Hierarchical Display

::Term D
:Term E
Term F
.Term G
.Term H

Invalid multiple entries or unintentional splits can occur in the Hierarchical Display if care is not taken in BT/NT structuring. Terms should be entered in the *Thesaurus* file with only their most immediate broader and narrower terms cited, i.e., in the same manner in which they will appear in the Alphabetical Display. In Example 4, if Term F were entered citing both D and E as broader terms and G and H as narrower terms, the Hierarchical Display, interpreting this as meaning D and E are at the same level of broadness and G and H are at the same level of narrowness, would contain incorrect double entries.

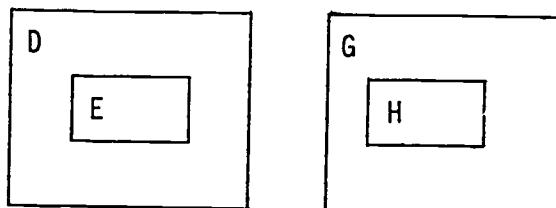
```
:Term D] - Incorrect Double Entry
::Term D
:Term E
Term F
.TERM G
..Term H
.Term H] - Incorrect Double Entry
```

On the other hand, assume that Terms D through H are members of an existing hierarchy and that new Term "X" needs to be inserted between F and G. The input of Term X would correctly carry the BT Term F and the NT Term G. But, in addition, the previous (now invalid) relationship between F and G would need to be expunged. Otherwise, the following faulty hierarchy would result:

```
Term D
.TERM E
..Term F
...Term G] - Incorrect Double Entry
...Term X
....Term G
.....Term H
```

The inverse situation occurs if a term is deleted from the middle of a hierarchy. For instance, if Term F were deleted from the Example 4 hierarchy or purged altogether from the *Thesaurus*, a second transaction would be necessary in order to maintain the BT/NT relationship between Terms E and G. Otherwise, a hierarchical "split" would result and leave two independent and seemingly unrelated hierarchies, as in Example 5.

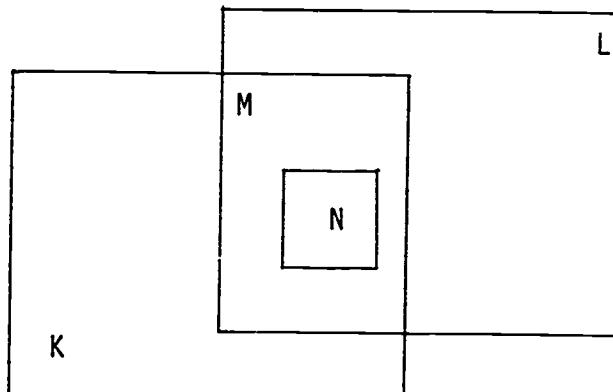
Example 5:



Example 4 illustrates a hierarchy with many levels, each with only one immediately adjacent BT or NT relationship. Although only the next higher (BT) or lower (NT) level is used in generic structuring, this does not mean that a term is limited to one BT or NT.

A given term may be a member of two entirely separate hierarchies. Example 6 illustrates this characteristic, sometimes called a polyhierarchical relationship:

Example 6:



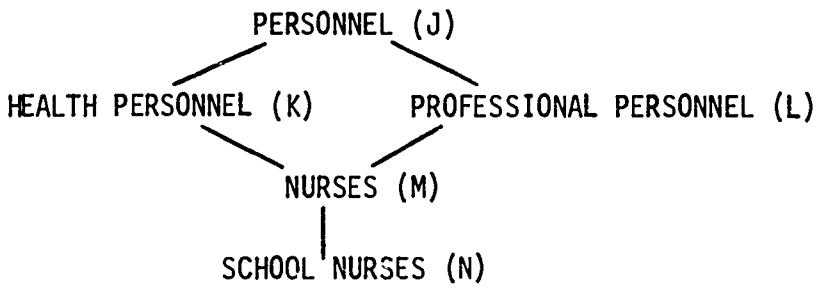
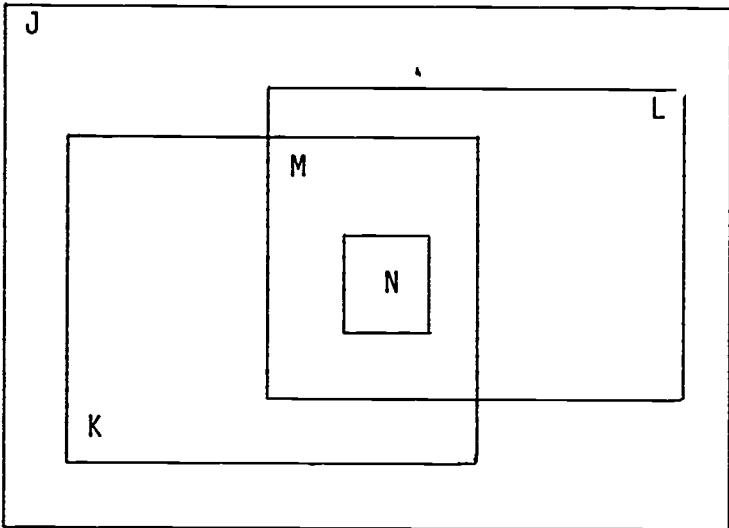
```

graph TD
    K[INSTITUTIONS (K)] --> M[LIBRARIES (M)]
    M --> N[SCHOOL LIBRARIES (N)]
    L[INFORMATION SOURCES (L)]
  
```

Terms K and L are both immediately broader to Term M and should be so displayed. Term M (and its NT, Term N) will then properly appear in both hierarchies. Below the example are four ERIC Descriptors, arranged to further illustrate this relationship.

Example 7 illustrates the possibility of Terms K, L, M, and N appearing together in one hierarchy:

Example 7:



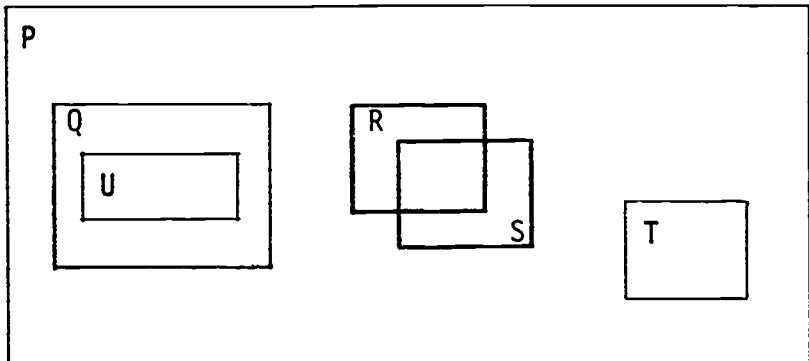
Term J encompasses Terms K through N. Once again, ERIC Descriptors are arranged below the example to further illustrate these relationships.

In this instance, Terms M and N would appear twice in the hierarchy of Term J, under both Term K and Term L. This double appearance of M and N is legitimate, since Terms K and L have no generic relationship to each other even though they share a common BT and the same NTs. A Hierarchical Display printout of this example would appear as follows:

```
Term J
.TERM K
..TERM M
...TERM N
.TERM L
..TERM M
...TERM N
```

As one often finds more than one BT at the next higher generic level, multiple NTs at the next lower generic level are even more common. This situation may be illustrated as follows:

Example 8:



Terms Q through T are all narrower to Term P at the next generic level and would be carried as NTs during an input to the *Thesaurus* file. Only Term U would not be included during input, since it is an NT of Term Q. Its inclusion directly under Term P would cause an invalid double entry in the hierarchy.

(3) Part-Whole Relationships

One relationship that is occasionally handled by the NT/BT structure but that cannot legitimately be called "generic" is the part-whole relationship. Parts and their wholes, if cross-referenced to each other at all, are usually related as RTs. For example, SCHOOL BUILDINGS and CAMPUSES are certainly related to one another but in the sense of a part to the whole, not a generic sense. SCHOOL BUILDINGS are a part of CAMPUSES, but are not CAMPUSES in themselves. (See section on "Related Terms.")

Part-whole NT/BT relationships, in which the "part" always and unambiguously belongs to a particular "whole," are used in many information retrieval systems. It is particularly common to see geographic locations structured in this manner (e.g., Maryland BT United States, Maryland NT Baltimore). Parts of the human body are sometimes arranged this way also (e.g., Stomach BT Digestive System, Brain NT Cerebrum).

The ERIC system indexes geographic locations as Identifiers (see Identifier section VIII-2). Identifiers are not structured in hierarchies. Also, the ERIC *Thesaurus* carries only a few Descriptors relating to the human body,

and these are not structured into part-whole hierarchies. Part-whole hierarchies can be useful in structuring the relationships of a certain limited number of terms for indexing and searching. However, there are few such hierarchies in the ERIC *Thesaurus* today, and their use generally is discouraged.

(4) Possible Use Relationships

Just as part-whole relationships are generally disregarded for BT/NT structuring, so are relationships based on the possible applications or uses of an entity. For example, the term ATLASES is not considered to be a member of the generic family INSTRUCTIONAL MATERIALS because, although ATLASES are sometimes used as INSTRUCTIONAL MATERIALS, they are not necessarily used this way. However, ATLASES are always REFERENCE MATERIALS, and an NT/BT structure here would be correct. ATLASES and INSTRUCTIONAL MATERIALS could be RTs, but since REFERENCE MATERIALS is already carried as an RT of INSTRUCTIONAL MATERIALS, the one relationship is sufficient. (See RT rules regarding proliferation, item C.2.g.(3).b) of this section.)

Another example of this situation is the relationship between WINDOWS and VENTILATION. WINDOWS are objects, and VENTILATION is a process, so there can be no NT/BT relationship. But, even if the latter term's form was VENTILATORS, there could still be no hierarchy, because some WINDOWS are not VENTILATORS at all, but are used for the sole purpose of LIGHTING. Usage relationships such as these—WINDOWS used for LIGHTING and VENTILATION—are carried in the ERIC *Thesaurus* as RTs.

(5) Special Problems with Hierarchies

(a) Finding the Right Hierarchy

Determining the correct hierarchical placement for a particular term is usually not a difficult task. Familiarity with, and experience in using, the *Thesaurus* are valuable for generic structuring, but are not essential.

The important thing is to remember to determine *Thesaurus* precedents and to follow their examples. The attempt should be to locate parallel *Thesaurus* terms and to use their hierarchical placement as a guide. The type of term being worked on is important—does it represent action, a group of objects, a process, a subject field or discipline? A determination of "type" will narrow down considerably the hierarchical families where a particular term might fit. The proper Descriptor

Group should also be determined, and existing terms in the chosen group should be examined to see where they fit in the hierarchies. Additionally, the Rotated Display should be consulted to locate terms having the same, or nearly the same, words as the term under consideration—see the hierarchies of those terms. If a proper hierarchical placement cannot be determined after these steps, other thesauri or structured word lists should be checked to see if and how they carry the particular term. (Remember, however, that the existing structure in the ERIC *Thesaurus* takes precedence and should guide the final placement of a term more than the structures of other authorities.)

If, after all of the above steps, a proper hierarchy still cannot be found, the particular term is most likely a hierarchical "isolate" (i.e., it has no NTs nor BTs).

Proper hierarchical placement requires that the scope of a particular term: (1) be within the scopes of its BTs, and (2) adequately subsumes the scopes of all its NTs. This is why it's better to leave a term in isolation than to force it into a hierarchy where it does not truly belong. Terms improperly placed in isolation may be overlooked in "subject-specific" indexing and searching; on the other hand, improper hierarchical placement can cause the incorrect term and all its NTs and BTs to be misread and misused (a more serious consequence).

(b) Hierarchical Visibility

A rule for generic structuring in item C.2.f.(2). (b) states that terms are entered in the *Thesaurus* file citing only their most immediate broader and narrower terms. Without this rule, there could be no multilevel hierarchical structures (i.e., beyond one BT/NT level).

Terms appear in the Alphabetical Display (main display) of the *Thesaurus* just as they are entered in the file. Therefore, just as it must be remembered to enter a term with only its most immediate BTs and NTs, so it must also be remembered that the main Alphabetical Display of a term shows nothing beyond these immediate levels. Take, for example, the term PHYSICAL ACTIVITIES as it appears in the Alphabetical Display:

PHYSICAL ACTIVITIES
NT ATHLETICS
BICYCLING
DANCE
EXERCISE
HORSEBACK RIDING
LIFTING
RUNNING
BT ACTIVITIES

This display shows seven NTs and one BT. Additional generic structures or more distant hierarchical relationships could, of course, be checked by examining the main display of each BT/NT cross-reference and continuing to track BTs and NTs until the most general or specific term is found. Such cross-checking is tedious and time-consuming and can be entirely avoided if the Hierarchical Display is consulted. PHYSICAL ACTIVITIES appears in this display as follows:

```
:ACTIVITIES
PHYSICAL ACTIVITIES
.ATHLETICS
..ARCHERY
..BASEBALL
..BASKETBALL
..EXTRAMURAL ATHLETICS
..FIELD HOCKEY
..FOOTBALL
..GOLF
..GYMNASICS
...TUMBLING
..ICE SKATING
..INTRAMURAL ATHLETICS
..LACROSSE
..LIFETIME SPORTS
..ORIENTEERING
..ROLLER SKATING
..SKIING
..SOCCER
..SOFTBALL
..SQUASH (GAME)
..SWIMMING
..TENNIS
..TRACK AND FIELD
..VOLLEYBALL
..WATERSKIING
..WEIGHTLIFTING
..WOMENS ATHLETICS
..WRESTLING
.BICYCLING
.DANCE
.EXERCISE
..CALISTHENICS
.HORSEBACK RIDING
.LIFTING
..WEIGHTLIFTING
.RUNNING
..JOGGING
```

The Hierarchical Display provides complete two-way visibility of the broader-narrower relationships of every Descriptor in the *Thesaurus*. In the case of PHYSICAL ACTIVITIES, the display confirms that there is, in fact, only one BT, but it also shows a total of 36 NTs (WEIGHTLIFTING appears twice), including 29 additional specific terms that were not evident in the main display of the term.

Total hierarchical visibility is provided only by the Hierarchical Display. Indexers and searchers alike need to be familiar with this tool and encouraged to use it regularly. Consistent usage by indexers results in subjects of the appropriate level of specificity being posted to ERIC records. Assuming proper indexing, consistent usage by searchers assures precise and relevant retrieval. Failure to consult this display may cause confusion over seemingly incomplete BT/NT relationships that can result in indexing inconsistencies and consequent retrieval problems.

Indexing and searching, however, should never be performed on the basis of the Hierarchical Display alone. Full meanings and proper uses of terms cannot be determined without consulting the main Alphabetical Display, with its Scope Notes and cross-references.

(c) Hierarchical Searching

ERIC documents are indexed to the most specific available Descriptors. An NT and its BT would not normally be indexed to the same document, unless both specific and general subjects were spoken to in some detail. Thus, complete searching of a broad concept (e.g., PHYSICAL ACTIVITIES) needs to consider not only documents posted by the broad term but all documents posted by its narrower terms (e.g., LIFTING, RUNNING) as well. Relevant RTs must be considered too (e.g., PHYSICAL ACTIVITIES has the RTs PHYSICAL EDUCATION and PLAYGROUND ACTIVITIES among others).

Access to the *Thesaurus* is essential in searching. A manual searcher might look up a term like LIBRARIES and never think to consider ACADEMIC LIBRARIES, SPECIAL LIBRARIES, or other available NTs under which documents of interest might be found. And, what if the searcher looks up the BT LIBRARIES in an index journal and finds nothing? Without considering the *Thesaurus* and its NTs, it might be assumed at this first glance that the particular index journal has nothing on the subject. On the other hand, without access to the *Thesaurus*, a computer searcher might use a common word to "hit" a number of Descriptors (e.g., LIBRARIES, ACADEMIC LIBRARIES, etc.) but, at the same time, fail to find many documents indexed by cross-referenced terms not having such common words. Even in full-text computer searching, the *Thesaurus* provides many clues for alternative words, phrases, and coordination strategies.

The major online retrieval vendors offering access to ERIC do not provide for automatic searching of entire generic trees (either in the broader or narrower direction). Only those terms explicitly included in a search strategy are utilized in a search.

(d) Rule of Specificity

Just as the "rule of specificity" comes into play in the indexing process, it must be a consideration in generic structuring as well.

Basically, the rule as applied to indexing states that documents will be indexed to the specific level of subject matter with which they deal, and will not also be "indexed up" to a higher generic level, except in instances where generalities and particulars are handled together in the same material. Indexing "specifically" gives a searcher, armed with the *Thesaurus*, the maximum number of options, i.e., the searcher may request those items indexed by:

- an NT alone;
- its BT alone;
- either the NT or its BT;
- both the NT and BT.

If the rule of specificity is not observed, the searcher has fewer options. This principle is discussed in more detail in Section VII of this manual, item I.5.a entitled "Indexing Specificity."

However, the rule of "specificity" applies only to indexing with Descriptors since only Descriptors have comprehensive NT/BT structures.

Identifiers are not hierarchically related to Descriptors. Therefore, as the examples below illustrate, specific Identifiers are often assigned concurrently with generic or conceptually broader Descriptors.

Examples: IDEN Oklahoma
DESC State Programs; State Surveys

IDEN Minnesota Reading Readiness Test
DESC Reading Readiness Tests

IDEN Education for All Handicapped
Children Act
DESC Children; Disabilities; Federal
Legislation; Federal Programs

IDEN_Apollo Program
DESC_Aerospace Technology; Lunar Research

IDEN_Ice Hockey
DESC_Athletics

IDEN_Algonquian Languages
DESC_American Indian Languages

IDEN_Solid Waste Management
DESC_Waste Disposal

IDEN_Inference
DESC_Logical Thinking

IDEN_Key Punch Operation
DESC_Business Skills; Clerical Occupations;
Data Processing Occupations

IDEN_Library Statistics
DESC_Library Administration; Library
Research; Library Surveys; Statistical
Data

IDEN_Rock Music
DESC_Music

IDEN_Shopping
DESC_Stealing

IDEN_Love
DESC_Affection; Attachment Behavior;
Emotional Experience; Psychological
Patterns

Emerging subjects or concepts in the literature that have the characteristics of Descriptors, but which have not yet been added to the *Thesaurus*, should not be permitted to linger for long in the Identifier field. Because of the "indexing to the specific Descriptor" rule, Identifier indexing does not allow generic/specific distinctions and, without the guidance of hierarchical and related-term structures, can be very inconsistent. It is not hard to see that a group of indexers will more readily agree on how to index a particular document, if most of the appropriate vocabulary is controlled and structured. On the other hand, indexing disagreements are more likely when a large percentage of a system's indexing vocabulary is based on a simple alphabetical list of (theoretically unlimited) term choices.

Excluding the first four examples, each of the above Identifiers has the characteristics of a Descriptor and might be considered as a candidate for the ERIC *Thesaurus*. A Clearinghouse's general rule of thumb should be to start thinking of a term's *Thesaurus* "fit" after about 5 postings, and to have a *Thesaurus* input form in the mail to the Facility after about 10 postings.

g. Related Terms

(1) General

Related Terms (RTs) are cross-references that are neither hierarchical (BT/NT) nor equivalent (USE/UF) but are essential for informing users of alternative terms for indexing/locating documents on given subjects. An RT relationship exists when there is a strong conceptual bond between two terms, which sometimes, but not always, is reflected by concurrent usage in the literature.

The RT relationship is always reciprocal or two-sided, as the two examples given below show:

CHILD ABUSE	CHILD WELFARE
UF ABUSED CHILDREN	BT QUALITY OF LIFE
BT ANTI SOCIAL BEHAVIOR	RT ADOPTED CHILDREN
RT CHILD WELFARE	CHILD ABUSE
CHILDREN	CHILDREN

(2) Categories of RTs

(a) Defined by American National Standard Z39.19

Sometimes called the "associative relationship," the RT has been referred to as "vague" and "difficult to define," and it is universally acknowledged that assignments must be somewhat subjective. Current authorities, however, do cite several rules or principles that indexers or lexicographers can consider in establishing RTs. The following guidance is from *American National Standard Z39.19-1974* (also found in the *EJC Thesaurus Rules and Conventions*). The examples, however, are ERIC's.

"The RT reference is employed as a guide from a given term to other terms that are closely related in ways other than the genus-species (BT-NT) relationship. In general, any two terms bear the cross-reference RT to each other if it is believed that the user,

when examining one of them, might want to be reminded of the existence of the other.

RT references may be used to identify relationships such as the following:"

- Terms that are near-synonyms

ACHIEVEMENT/PERFORMANCE
BIRTH/REPRODUCTION (BIOLOGY)
CURRICULUM GUIDES/TEACHING GUIDES
EDUCATION/INSTRUCTION
ORAL READING/READING ALOUD TO OTHERS

- Terms that have viewpoint (or practical) interrelationships, such as a relationship based on usage

ARITHMETIC/FRACTIONS
ARTISTS/PAINTING (VISUAL ARTS)
CHILDREN/PLAY
COST INDEXES/INFLATION (ECONOMICS)
CULTURE FAIR TESTS/TEST BIAS
HEALTH/DISEASES
HEALTH FACILITIES/MEDICAL SERVICES
HUNGER/NUTRITION
WINDOWS/VENTILATION

- Terms representing concepts bearing a whole-part relationship to each other

BUILDINGS/ROOFING
HUMAN BODY/CARDIOVASCULAR SYSTEM
INTERNATIONAL RELATIONS/DISARMAMENT
SCHOOL CATALOGS/COURSE DESCRIPTIONS

- Terms that represent overlapping concepts

CIVIL LIBERTIES/JUSTICE
CREDIBILITY/INTEGRITY
DRUG EDUCATION/DRUG REHABILITATION
GEOGRAPHY/CARTOGRAPHY
SOCIAL PSYCHOLOGY/CRIMINOLOGY
SPECIFICATIONS/CRITERIA

(b) Defined by Other Authorities

Other authorities which elaborate the RT relationship and provide useful examples are:

- Barhydt & Schmidt. *Information Retrieval Thesaurus of Education Terms*. Cleveland: Press of Case Western Reserve Univ., 1968. pp 15-18..

- Lancaster. *Vocabulary Control for Information Retrieval*. Washington: Information Resources Press, 1972. pp 80-85 (Includes the Barhydt/Schmidt discussion).
- UNESCO. *SPINES Thesaurus*. Vol. 1. Paris: 1976. pp 42-43.
- British Standards Institution. *Guidelines for the Establishment and Development of Monolingual Thesauri*. London: 1979. (BS 5723:1979) pp 11-12.
- Borko & Bernier. *Indexing Concepts and Methods*. New York: Academic Press, 1978. pp 29-30.

These few sources, constituting about all that has been written on the subject of RTs, provide an appreciation and understanding of the complexities of RT relationships. Each source defines somewhat different categories of RTs, but all are variations on the four basic ANSI categories given above. Some of the other categories of RT relationship to be found in these works (again, the examples are ERIC's) are:

- Field of Study and Items Studied

CHEMISTRY/ATOMIC STRUCTURE
PSYCHIATRY/MENTAL HEALTH
SEX EDUCATION/VENEREAL DISEASES

- Near Antonyms (Interactive)

DEDUCTION/INDUCTION
FAILURE/SUCCESS
MARRIAGE/DIVORCE

— A Thing and Its Counter Agent

RATS/PESTICIDES

- Cause and Effect

DEATH/WIDOWED
LEARNING/SCHOLARSHIP

- A Thing and Its Producing Agent

INSURANCE/RISK
LONELINESS/SOCIAL ISOLATION
POPULAR CULTURE/MASS MEDIA
VIOLENCE/REVOLUTION

—Product and Process

ORAL HISTORY/INTERVIEWS
PHOTOGRAPHS/PHOTOGRAPHY
READERS THEATER/ORAL INTERPRETATION
TECHNOLOGICAL ADVANCEMENT/INVENTIONS

—Process and Responsible Group

AGRICULTURE/FARMERS
SUPERVISION/SUPERVISORS

• A Thing and Its Recipient or User

CHILD WELFARE/FOSTER CHILDREN
SEASONAL EMPLOYMENT/MIGRANT WORKERS
SEWING MACHINE OPERATORS/FASHION INDUSTRY

• A Thing and Its Purpose or What It Characterizes

BIBLIOGRAPHIES/BOOKS
LOCAL GOVERNMENT/COMMUNITY SERVICES
MARRIAGE COUNSELING/MARITAL INSTABILITY
TEACHING MACHINES/PROGRAMED INSTRUCTION
TOYS/PLAY

• Having the Same Broad Term and Overlapping
Conceptually (sometimes referred to as "siblings";
often used interchangeably)

AMERICAN INDIANS/CANADA NATIVES
PARENTS/FAMILY (SOCIOLOGICAL UNIT)
RETAILING/MERCHANDISING
RHETORIC/SPEECH

The above categories illustrate the most common RT relationships. No attempt has been made to describe every conceivable type of RT. Lancaster states that "in a sense, every thesaurus term is related to every other thesaurus term at varying strengths of semantic association." The task of the indexer or lexicographer, then, in developing an RT display, is to try to include those terms that are sufficiently closely related to be of obvious benefit to users of the ERIC *Thesaurus*.

(3) Selection of RTs for a Term Display

(a) Establishing a List of Candidate RTs

It is recommended that you do not start by trying to fit the concept you're working on into predetermined RT categories such as the ones described above. Instead, break the concept down into the various

ways it can be used or expressed. (For example, BOOKS are written, published, reviewed, serialized, listed in bibliographies, housed in libraries, etc.) Make a list of all potential RTs as you think of them.

Now, look at the Scope Note you developed for the concept and definitions you consulted, and add key words and phrases from these to your list. You may want to expand your list by looking at other thesauri to see how they express and display your concept. Also of value is a check to see if the concept appears as an Identifier or in the text of ERIC records. Full-text and Identifier searches of the file, to examine the indexing terms assigned to the retrieved records, are recommended for this purpose, if you have the means. You should now have a reasonably complete list of alternative words and phrases that are available for expressing your concept and for putting it into a proper thesaurus context.

You are now ready to begin structuring RTs for your concept. First, match all terms on your list with existing Descriptors in the *Thesaurus*. You will then have a new list of terms to work from, and your original list of terms may be set aside. From this point on, you're working with legitimate ERIC Descriptors.

Go Descriptor-by-Descriptor down your new list, looking at the full display of each term. In doing this, you will undoubtedly find other Descriptors that you initially did not consider. Add these to your list. The main thing that you'll be trying to decide by this exercise is whether your concept fits comfortably in each of the various displays of the candidate RTs under examination. Consider your concept's hierarchical siblings (other Descriptors from the hierarchy(s) you chose for your concept, especially those at the same hierarchical level) and other Descriptors that are grammatical variations of your concept and its synonyms (e.g., gerunds, adjectival variations, etc.). Do they appear in a given display? If not, your concept probably does not belong there.

On finishing this exercise, you will have a third list of Descriptors which, in all probability, will be your final list of recommended RTs. However, it is usually helpful to go through the list once more to look for conceptual "holes" or "displacements." A look at the *Rotated Display* is helpful here. Ask yourself during this check if broader or single-word Descriptors can better express the relationships you want to convey than the more specific terms you are considering.

(b) Avoiding Proliferation of RTs

It is very important to avoid proliferating RTs since no one can effectively use excessively long displays. Often, one RT cross-reference at the broad conceptual level can better express the desired relationship than several more specific references. In this regard, the maxim known as "Ockham's Razor" is useful to keep in mind.

Ockham's Razor...

"Multiplicity ought not to be posited without necessity."

...William of Ockham
(philosopher,
early 14th century)

For example, if HISTORY INSTRUCTION is related to HISTORY, it does not also need to be related to UNITED STATES HISTORY, MODERN HISTORY, BLACK HISTORY, etc. Additional examples are given below of ways to avoid proliferation in the RT field:

- Avoid proliferation. In the example below, STUDENT CHARACTERISTICS could conceivably be related to STUDENTS and all of its Narrower Terms, but a single cross-reference to STUDENTS is all that's necessary.

Preferred STUDENTS
RT STUDENT CHARACTERISTICS

Not Preferred PART TIME STUDENTS
RT STUDENT CHARACTERISTICS

- Try to select the proper hierarchical level for your cross-references. For example, DUAL ENROLLMENT and SHARED SERVICES are best related to INSTITUTIONAL COOPERATION, and not also to the narrower INTERCOLLEGIATE COOPERATION.

Preferred INSTITUTIONAL COOPERATION
RT DUAL ENROLLMENT
SHARED SERVICES

Not Preferred INTERCOLLEGiate COOPERATION
RT DUAL ENROLLMENT
SHARED SERVICES

INSTITUTIONAL COOPERATION
RT DUAL ENROLLMENT
SHARED SERVICES

- Try to select the simplest, most direct term, particularly when deciding among several potential terms in the same alphabetic sequence.

Preferred VERBAL COMMUNICATION
RT READING

Not Preferred VERBAL COMMUNICATION
RT READING MATERIALS

VERBAL COMMUNICATION
RT READING SKILLS

- Try to select the most subject-specific relationship available among several possible terms.

Preferred INTERNATIONAL EDUCATIONAL EXCHANGE
RT INTERNATIONAL PROGRAMS
STUDENT EXCHANGE PROGRAMS
STUDY ABROAD

INTERNATIONAL PROGRAMS
RT INTERNATIONAL EDUCATIONAL EXCHANGE

Not Preferred INTERNATIONAL EDUCATIONAL EXCHANGE
RT INTERNATIONAL PROGRAMS
STUDENT EXCHANGE PROGRAMS
STUDY ABROAD

INTERNATIONAL PROGRAMS
RT INTERNATIONAL EDUCATIONAL EXCHANGE
STUDENT EXCHANGE PROGRAMS
STUDY ABROAD

Preferred COOPERATION
RT INTERNATIONAL RELATIONS

PEACE
RT INTERNATIONAL RELATIONS

Not Preferred COOPERATION
RT INTERNATIONAL PROGRAMS
INTERNATIONAL RELATIONS

PEACE
RT INTERNATIONAL PROGRAMS
INTERNATIONAL RELATIONS

- Avoid improperly slanting or restricting a term. For example, PART TIME STUDENTS may be enrolled at all educational levels.

Not Preferred PART TIME STUDENTS
 RT ADULT STUDENTS

(c) RT Lists as Mini-Indexes

There are occasional situations where proliferation of RTs may be useful and valid. RTs can provide mini-indexes to some of the *Thesaurus'* most general terms. This is why terms like BEHAVIOR, BLACKS, COLLEGES, COMMUNITY, READING, etc. acquire long displays. This is particularly helpful for the beginning *Thesaurus* user who usually has a nominal concept in mind and needs to know the various combinations in which that concept is displayed in adjectival form. It could be argued that the "Rotated Display" should be used for this purpose, but such "selective" proliferation has become standard practice in most thesauri. Additionally, the conceptual relationships among terms in these situations are often not clear-cut. For example, who would want to argue that COMMUNITY ATTITUDES and COMMUNITY ROLE have a closer conceptual relationship to COMMUNITY than COMMUNITY LEADERS and COMMUNITY SCHOOLS? It is easier and less confusing in these cases to simply list all such relationships under the broad, most general terms.

3. Divisions of the *Thesaurus*

To assist the user (indexer or searcher) of the *Thesaurus*, the terminology is arranged in four different sequences, each providing a different approach. The principal or primary arrangement is an alphabetical display of Descriptors (along with a complete display for each), with the other three displays acting, in effect, as indexes to the primary display:

PRIMARY ARRANGEMENT

Alphabetical Display

SECONDARY ARRANGEMENTS

Rotated Display
 Hierarchical Display
 Descriptor Group Display

SPECIAL NOTE: None of the three secondary arrangements show Descriptors in their complete context. Full meanings and intended usages for Descriptors cannot be determined without consulting the Alphabetical Display, the only one of the four arrangements containing Scope Notes and complete cross-reference structures. NEVER use any one of the three secondary arrangements for direct indexing or searching! ALWAYS check the Alphabetical Display before using any Descriptor!

Indexers must remember that the integrity of the *Thesaurus*, and the equivalence between a particular Descriptor and its postings, are fundamental to effectiveness in retrieval. NEVER use a Descriptor in a sense that violates its intended meaning! ALWAYS check RIE and CIJE to see how a Descriptor has been used, if (for whatever reason) the intended meaning of a term cannot be determined by consulting the Alphabetical Display. Let the central lexicographic staff at the Facility know when Descriptor misuse is discovered; the Lexicographers will coordinate whatever action is necessary to correct the problem.

a. Alphabetical Display

This is the only *Thesaurus* display that should be used for direct indexing and searching. All valid Descriptors (main terms), invalid Descriptors ("dead" terms), and USE references appear in this display interfiled alphabetically word-by-word at one location. Descriptors are "preferred" (indexable) *Thesaurus* terms, while invalid Descriptors and USE references are "non-preferred." Each type of term is displayed with its complete record, as follows:

- Descriptors (main terms)
Scope Note (SN), Group Code, Add Date, Postings Count, Used For (UF) references, Narrower Terms (NT), Broader Terms (BT), and Related Terms (RT).
- Invalid Descriptors ("dead" terms)
Scope Note (SN), Group Code, Add Date, and Postings Count.
- USE References
(reciprocals of UF references; therefore, no subfields are carried in these records).

Other items of this section fully describe these displays. Please refer to the following:

Descriptor Format.....item C.2.b.(4)

Invalid "Dead" Descriptors.....item C.2.b.(5). (b)

USE References.....item C.2.e

b. Secondary Arrangements

The following three *Thesaurus* display "arrangements" are secondary to the main Alphabetical Display. Each serves as a useful tool in achieving full *Thesaurus* utilization. Their purpose is to provide access to the Alphabetical Display; they should not be used for indexing or searching without consulting the Alphabetical Display.

(1) Rotated Display

The Rotated Display is a permuted alphabetical index of all words that form *Thesaurus* terms. Words in all Descriptors (main terms), invalid Descriptors ("dead" terms), and USE references are included. Since each separate word is considered as a filing unit, a term appears in as many locations in this display as it contains separate words, i.e., single-word terms file in one location, two-word terms file in two locations, and so on. Subfiling under any one file point is performed first on the basis of the words to the right of the file point and second, on the basis of the words to the left of the file point. The word order within the term itself is not altered.

Example: PRIVATE SCHOOL AID

STUDENT FINANCIAL AID OFFICERS

PRIVATE SCHOOL AID

LEGAL AID PROJECTS (1966 1980) Use LEGAL AID
SCHOOL AID Use EDUCATIONAL FINANCE
STATE AID

PRIVATE SCHOOL AID

PRIVATE SCHOOLS

PRIVATE UNIVERSITIES Use PRIVATE COLLEGES

PRIVILEGED COMMUNICATION Use CONFIDENTIALITY

PROACTIVE INHIBITION Use INHIBITION

PAROCHIAL SCHOOL AID (1972 1980) Use PAROCHIAL SCHOOLS and PRIVATE SCHOOL AID
SCHOOL AID Use EDUCATIONAL FINANCE

PRIVATE SCHOOL AID

SCHOOL AIDES

SCHOOL ARCHITECTURE (1966 1980) Use EDUCATIONAL FACILITIES DESIGN

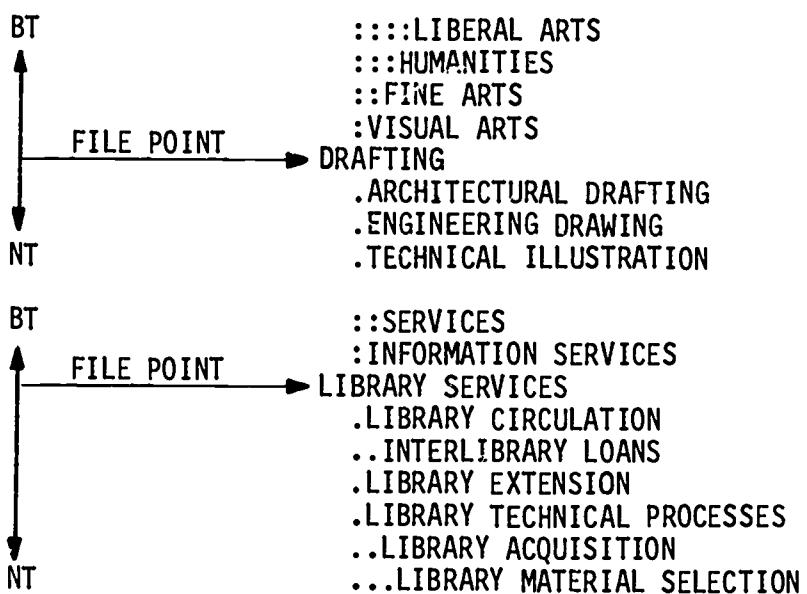
USE references are clearly distinguished from Descriptors in this display. Invalid Descriptors can be identified by accompanying "life span" notations, e.g., (1966 1980), and by having no USE reference.

The Rotated Display is useful in determining all usages of a particular word in the *Thesaurus*, without respect to its position in a multiword term. The display tends to group related terms where they may often be separated in the main Alphabetical Display, thus aiding indexers in finding more precise terminology, search analysts in translating their inquiries into the language of the system, and subject analysts in structuring new terms.

(2) Hierarchical Display

The Hierarchical Display depicts families of Descriptors (generic trees) related by the taxonomic concept of "class membership." Complete, two-way visibility is provided for all broader-narrower relationships of every *Thesaurus Descriptor*. Each generic tree is carried to its farthest extreme in both directions. The display files the Descriptors in letter-by-letter order,* ignoring spaces between words.

Two sample generic trees are shown below, one for the term DRAFTING and the other for the term LIBRARY SERVICES. Broader terms (i.e., BTs) are identified by preceding colons and appear above each file point (main entry). Narrower terms (i.e., NTs) are identified by preceding periods and are listed below each file point. Multiple colons or periods indicate successively broader or narrower levels of terms.



Descriptors having neither BTs nor NTs appear in the display as isolates. Included among these isolates are the "invalid" Descriptors, identified by accompanying "life span" notations, e.g., "(1966 1974)," "(1969 1980)." Invalid Descriptors are the only terms appearing in this display that are not currently used in indexing.

*The main Alphabetical Display is filed in word-by-word order (a change from earlier letter-by-letter filing). A program to similarly convert the Hierarchical Display to word-by-word order is underway.

The Hierarchical Display serves as a valuable tool for indexers in their attempts to index documents to the most appropriate level of specificity, and for searchers in their attempts at developing comprehensive search strategies.

See item C.2.f.(5), under "Hierarchical Visibility," for a discussion on the importance of using the Hierarchical Display.

(3) Descriptor Group Display

The Descriptor Group Display places each term in the *Thesaurus*, excluding UFs, into one (and only one) of 41 broad subject categories. Together, these categories or "Descriptor Groups" provide a "table of contents" to the *Thesaurus* and an overview of ERIC's subject coverage. Descriptors are alphabetized word-by-word under each group. The display is provided for browsing and for narrowing down the number of terms to be looked at in given situations. It is meant to provide suggestions and be of general assistance to users, whether indexers, searchers, or lexicographers; but it is not a formal classification scheme and should not be construed as such.

Each Descriptor Group is defined by a Scope Note. The set of 41 Scope Notes is necessary for comparing coverage among the groups and always accompanies (precedes) any distribution of the display. Also, each group is represented in the system by a 3-digit "Group Code."

See item C.2.c for the complete Descriptor Group structure, a listing of the Group Codes, further information on the groups' functional applications, and details on how individual Descriptors are assigned to the groups.

c. Frequency of Distribution

Working Copies of the Alphabetical, Rotated, and Hierarchical Displays are produced at least annually for internal use by ERIC staff. Working Copies of the Descriptor Group Display, while not regularly scheduled, are produced as needed. The published or commercial *Thesaurus* includes all four displays and is updated and published at least biannually.

D. Evaluation and Decision Criteria for a New Descriptor

During the course of indexing, indexers become aware of concepts that are not adequately represented in the existing *Thesaurus*. Concepts that are found in documents or journal articles being added to RIE and CIJE but that are not covered by the *Thesaurus* are considered "candidate Descriptors."

The following guidelines are provided to aid indexers in determining whether a candidate Descriptor should be added to the *Thesaurus*.

1. Does It Actually Appear in Documents Being Indexed?

To be considered for the ERIC *Thesaurus*, a concept must actually appear in the literature being indexed. It cannot be added, for example, merely to complete the links in a hierarchical chain. For instance, the *Thesaurus* contains COLLEGE ENTRANCE EXAMINATIONS as a Narrower Term of TESTS, skipping the intermediate term ENTRANCE EXAMINATIONS; nevertheless, ENTRANCE EXAMINATIONS cannot be added as long as all usages of the term either pertain to college-level examinations or overlap considerably with other closely related conceptual areas (e.g., OCCUPATIONAL TESTS) already suitably covered in the *Thesaurus*.

The reason for this rule or constraint is that the existence of unused Descriptors in the *Thesaurus* would misrepresent the content of the data base and would lead to dissatisfaction among users.

2. Does It Qualify for Descriptor Status or Is It an Identifier?

Highly specific entities, including most proper nouns/noun phrases, are sometimes the subjects of documents. These include:

Geographic Locations	Persons
Legislative Titles	Projects
Literary/Artistic Titles	Test Titles
Organization Names	Trade Names

Called "Identifiers," these entities are allowable index terms, and a special field is provided for them. Identifier indexing is intended to supplement Descriptor indexing, and Identifier use must always be in addition to (rather than in lieu of) Descriptor use.

The almost infinite number of specific entities generally makes them undesirable for inclusion in the tightly controlled vocabulary of the *Thesaurus*. Some, because of "staying power" in the literature, have graduated over time to Descriptor status (e.g., AFRICAN CULTURE, AMERICAN INDIANS, BAYESIAN STATISTICS, CHRISTIANITY, FRENCH, MEXICANS, RUSSIAN), but this phenomenon is the exception to the rule. *Thesaurus* precedence is the indexer's best guide in determining whether a proper noun/noun phrase should be considered as a candidate Descriptor. For instance, terms in the eight categories listed above never qualify for Descriptor status. (See Section VIII (Part 2) for a complete discussion of Identifiers.)

Of course, not all entries in the Identifier field are proper nouns. Any concept working its way into the literature of the field must, as a rule, first be "tried out" as an Identifier. This practice allows a concept to be observed while accumulating usage and/or acceptance among various authors. Frequency of indexing occurrence is always an important consideration in deciding whether to add a new conceptual-type term to the *Thesaurus*.

3. Is It Useful?

Candidate Descriptors should be evaluated on the basis of their usefulness in communication, indexing, and retrieval. In general, the utility of terms can be estimated by considering: the relative frequency of their occurrence in the literature; the relative frequency of their previous indexing use as Identifiers; their proximity in meaning to existing Descriptors; their technical precision and acceptability in the field; their transience, stability, and "staying power." These factors are interdependent and must often be considered together.

4. Is It a Synonym?

An especially important consideration in recommending a candidate Descriptor is its closeness in meaning to terms already in the *Thesaurus*. To prevent unwarranted scattering of similar information, terms having certain close relationships should be considered synonyms, i.e., synonymous from the practical point of view of retrieval.

This guideline encompasses many near- or quasi-synonymous terms that would not be considered as synonyms in ordinary contexts. Fine distinctions based on dictionary definitions are not important if they do not hold up from the point of view of searching. The following examples illustrate groups of terms that may be considered synonyms for the purposes of retrieval.

- CITY SCHOOLS
URBAN SCHOOLS

CLASSIFICATION
CATEGORIZATION

SIGHT
VISION
 - ACADEMIC ACHIEVEMENT
ACADEMIC PERFORMANCE

ADMINISTRATION
MANAGEMENT

(Pairs of "pure" synonyms.)

(Usage is indistinguishable in the literature.)

- COLLEGE FACULTY
COLLEGE TEACHERS

 ("Faculty" is technically broader than "teachers"; yet, "faculty" is the accepted term used in the literature, as well as in "real life," for postsecondary instructional staff.)
- DROPOUTS
SCHOOL DROPOUTS
EARLY SCHOOL LEAVERS

 (For purposes of efficient retrieval, "dropouts" and "school dropouts" are considered synonymous; "early school leavers" is the British equivalent of the U.S. "school dropouts.")
- CAREER CHANGE
EMPLOYMENT CHANGE
JOB CHANGE
OCCUPATIONAL CHANGE
VOCATIONAL CHANGE
WORK CHANGE

 (Subtle distinctions among these terms might be made, but it is difficult to imagine a search query that should not use all of them. USE references in the Rotated Display are helpful in discovering synonymous relationships; for instance, see the word "job(s)" in the Rotated Display and how it leads to each of the other near-synonyms shown at left.)
- PHYSICAL DISABILITIES
PHYSICALLY DISABLED

 (Distinctions between "person" terms and corresponding "condition" or "function" terms often cannot be realistically teased apart in indexing.)
- Maturity
IMMATURE

 (Terms at opposite ends of conceptual continuums should be treated as synonyms when it is unrealistic to consider dealing with one without the other.)
- WELDING
ARC WELDING
GAS WELDING

 (The example shows a broad term followed by two narrower terms in an area peripheral to the educational disciplines and to the interests of the ERIC system. These terms may be treated as synonyms because of their low usage level.)

Once it has been decided to consider two or more terms as synonyms for purposes of indexing and retrieval, one term must be chosen as the preferred term and entered as a Descriptor. The alternative "non-preferred" term(s) are entered as USE references (see item C.2.e).

Some nearly synonymous pairs or groups of terms in the ERIC *Thesaurus* are not treated as synonyms (i.e., preferred and non-preferred) because of a real need to retrieve the concepts separately. These are terms in core areas of immediate interest to the educational community and include such pairs as:

- ADVANTAGED and DISADVANTAGED;
- COLLEGES and UNIVERSITIES;
- GUIDANCE and COUNSELING.

When this situation occurs, the two terms must be cross-referenced, and Scope Notes must generally be written that will permit indexers and searchers to distinguish the terms and use them consistently.

5. How Should It Be Structured as a Candidate Descriptor?

All subject concepts not adequately covered by existing Descriptors and not "true" Identifiers should be evaluated as "potential" *Thesaurus* terms. Potential terms that are evaluated as synonyms to existing Descriptors should be added as UFs to those Descriptors (see item E.5 of this section). If synonymy is ruled out, potential terms are considered as "candidate Descriptors" and must be "scoped" (defined) then "fitted" into the structure of the *Thesaurus*. The mechanism for submitting candidate Descriptors (and all *Thesaurus* changes) is the "Vocabulary Development Form," discussed fully in item "E" below. As an indexer completes the form, a number of significant points should be kept in mind:

a. Ambiguity

Ambiguity in terminology, created by such factors as near synonyms, homographs, differences in spelling, word forms, and hierarchical treatment, is a barrier to effective communication. In preparing a new term for the *Thesaurus*, the avoidance of ambiguity should be a first consideration. Ambiguous terminology leads to inconsistent indexing and irrelevant search output.

Ambiguity can usually be avoided by preparing clear, precise Scope Notes indicating how terms should be used. Parenthetical qualifiers, e.g., INEQUALITY (MATHEMATICS), SECURITY (PSYCHOLOGY), are particularly helpful in preventing term misuse.

b. Specialization

Each area of educational technology usually develops its own specialized vocabulary or jargon to express the concepts peculiar to its own interests. Analysis of these specialized vocabularies reveals that many of the terms thought by a particular specialty perhaps to be unique are

actually identical to (or closely related to) terms used in other areas of technology. Moreover, it is quite common for technologists in one area to borrow terms from another and to use them for their own purposes. As an example, the term "Transformation Theory" is used in both the fields of linguistics and mathematics to refer to highly different concepts. Indexers must be aware of the fact that a candidate Descriptor within their Clearinghouse's scope of interest may have other meanings in other fields. The acceptability of a term can be researched by consulting dictionaries, encyclopedias, handbooks, and other authoritative reference materials.

If a term is suspected of having multiple meanings, the Clearinghouses whose "scopes" cover the various meanings should be consulted. Each Clearinghouse has a contact person on its staff, a Vocabulary Coordinator, to whom questions on vocabulary matters may be directed. Throughout the Descriptor appraisal and generation process, these Vocabulary Coordinators, as well as the central lexicographic staff at the ERIC Facility, should be considered resource persons that the indexer can contact whenever necessary for advice and information.

c. Appearance in Other Thesauri

Terminological consistency among thesauri is a desirable goal, and the vocabulary precedents established by other thesauri and subject heading lists are followed by ERIC whenever practicable. If a candidate Descriptor is included in reputable existing thesauri as a main, indexable term (i.e., not as a USE reference), then the chances are that the concept is an acceptable one. Nevertheless, it must be carefully ascertained that the structure, parenthetical qualifier, and Scope Note for the term being used as a precedent, do not conflict with the intended use within ERIC.

The following list includes the principal thesauri and subject heading lists used in ERIC lexicographic analysis:

1. *Child Abuse and Neglect Thesaurus of Subject Descriptors*. National Center on Child Abuse and Neglect, Washington, DC.
2. *EUDISED Multilingual Thesaurus for Information Processing in the Field of Education*. Prepared by Jean Viet. Council of Europe, Documentation Centre for Education in Europe. Mouton & Co., The Hague, Netherlands.
3. *ILO Thesaurus*. International Labour Office, Geneva, Switzerland.

4. *INSPEC Thesaurus*. Institution of Electrical Engineers. IEE Service Center, Piscataway, NJ.
5. *Legislative Indexing Vocabulary*. Compiled by Frederick John Rosenthal. Library of Congress, Congressional Research Service, Washington, DC.
6. *Library of Congress Subject Headings*. 2 vols. Washington, DC.
7. *Medical Subject Headings*. 2 vols. National Library of Medicine, Bethesda, MD.
8. *NASA Thesaurus*. National Aeronautics and Space Administration, Washington, DC.
9. *National Criminal Justice Thesaurus*. National Institute of Justice, Washington, DC.
10. *NICSEM Special Education Thesaurus*. National Information Center for Educational Media, University of Southern California, Los Angeles, CA.
11. *SPINES Thesaurus*. 3 vols. UNESCO, Paris, France.
12. *Thesaurus of Engineering and Scientific Terms (TEST)*. Office of Naval Research (Project LEX), Washington, DC.
13. *Thesaurus of Information Science Terminology*. By Claire K. Schultz. Scarecrow Press, Metuchen, NJ.
14. *Thesaurus of Psychological Index Terms*. American Psychological Association, Washington, DC.
15. *UNESCO Thesaurus*. 2 vols. Compiled by Jean Aitchison. UNESCO, Paris, France.
16. *UNESCO:IBE Education Thesaurus*. UNESCO, Paris, France.

d. Previous Indexing

Some new *Thesaurus* terms require historical references to previous indexing practices in their Scope Notes. This occurs in two specific situations:

- When a new term was previously a UF.

In this case, the following kind of note is added to the Scope Note field, after the definition, or alone if no definition appears:

(NOTE: PRIOR to Month & Year, e.g., Mar80,
THE INSTRUCTION "New Term", USE old USE reference"
WAS CARRIED IN THE THESAURUS)

- When a new term was not a UF, but was previously represented by some other term(s) not obvious from the new term's display. Examples are:

(NOTE: PRIOR to Month & Year, e.g., May81,
"term xyz" WAS FREQUENTLY USED TO INDEX THIS CONCEPT)

(NOTE: PRIOR to Month & Year, e.g., May 81, THIS CONCEPT WAS INDEXED UNDER "term xyz")

Such notes are usually not necessary when a new term has a BT (broader term), i.e., has an "obvious" place to go to gather previous postings.

Also, these notes would not be needed if the previous postings were light enough to accommodate reindexing or if there were Identifier postings that could be transferred. (See the emphasis ERIC places on reposting under item "E," "Vocabulary Development Form.")

e. Rules

The indexer generating a candidate Descriptor recommendation should be thoroughly familiar with the *Rules and Conventions for Descriptors* (item C.2 of this section) before attempting to complete the Vocabulary Development Form. These rules contain detailed information on the characteristics of ERIC Descriptors and on the cross-references, Scope Notes, and other data that make up Descriptor displays. The rules should be applied equally by both the generator of the *Thesaurus* recommendation and the lexicographer acting on it.

E. Vocabulary Development Form

The Vocabulary Development Form is provided for the convenient recording and processing of all changes to the *Thesaurus*, whether additions of new Descriptors, modifications of existing Descriptor displays, or Descriptor deletions (purges). All justification information is recorded on the form, including both authorities cited and personal contacts. Space is provided for indicating any RIE and CIJE postings changes that are necessary to keep the *Thesaurus* and postings files synchronous. The form was introduced in 1980 as part of the new Vocabulary Development Program (see item "F"). Its design is similar to ERIC's earlier "Descriptor Justification Form (DJF)," a version of which is shown in Figure VIII-1-2.

The Vocabulary Development Form (2-sided) is illustrated in Figure VIII-1-5. This is a completed version of the form, showing its use for adding a new Descriptor. Characteristics of the Vocabulary Development Form and requirements for completing it are discussed in the following paragraphs.

1. Line Spacing

The form is designed for use with any standard typewriter. All lines requiring data entry are spaced at six to the inch, so that when the form is lined up for entry of the Main Term, it should not be necessary to adjust the typewriter subsequently.

2. Character Limitations

In fields 1 and 4 through 7, allowable characters are limited to the following:

- Upper-case letters A-Z;
- Arabic numerals 0-9;
- Left and right parentheses, (and).

In field 2, use Arabic numerals only (3-digit Group Code).

In field 3, Scope Note/Definition, use any upper-case alphabetics, numerals, and special characters within the limits of machine character availability, except for the semicolon (;). Except in the case of an abbreviation, do not conclude a Scope Note with a period.

3. Field Length

a. Terms

A *Thesaurus* term, whether Descriptor or UF (Used For), may not exceed 50 characters (including spaces) in length.

In fields 1 and 4 through 7, the distance between the underscore following the data-entry keyword and the end of the field block is sufficient to permit the entry of 50 characters and spaces with a PICA (10 characters/inch) typewriter. A vertical mark is provided on each line to mark the 50-character point for ELITE (12 characters/inch) typewriters.

If a term contains more than 50 characters, it is invalid and cannot be accepted by the system.

Although there is no system limitation to the number of Used For terms, Narrower Terms, Broader Terms, and Related Terms that may be entered, practical considerations limit the number of lines that can be provided on the form. If more



VOCABULARY DEVELOPMENT FORM

FACILITY USE ONLY

ADD
DELETE
CHANGE
PURGE

1. Main Term (50 Character Limit)

TERM MAGNET SCHOOLS

3. Scope Note/Definition (370 Character Limit)

SCOPE SCHOOLS OFFERING SPECIAL COURSES NOT AVAILABLE IN THE REGULAR SCHOOL CURRICULUM AND DESIGNED TO ATTRACT STUDENTS ON A VOLUNTARY BASIS FROM ALL PARTS OF A SCHOOL DISTRICT WITHOUT REFERENCE TO THE USUAL ATTENDANCE ZONE RULES -- OFTEN USED TO AID IN SCHOOL DESEGREGATION

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF MAGNET CENTERS

5. Narrower Terms

NT

6. Broader Terms

BT SCHOOLS

7. Related Terms

RT BUSING

EDUCATIONAL PARKS

FEEDER PATTERNS

NONTRADITIONAL EDUCATION

SCHOOL DESEGREGATION

URBAN SCHOOLS

VOLUNTARY DESEGREGATION

Receipt Date (Facility Use Only)

- ADDING NEW TERM
- MODIFYING EXISTING TERM
- PURGING EXISTING TERM

† See reverse side of form for special instructions.

• Action Codes for Modifications Only.

A - ADD C - CHANGE D - DELETE

ELITE (12 pitch) typewriters stop at first mark.

PICA (10 pitch) typewriters stop at end of block.

2. Group Code GROUP_470 Act.

Act.

JUSTIFICATION INFORMATION

(Attach additional sheets if necessary.)

A. Indexer & CH

A. Stevenson/UD
G. Chapin/UD

B. Supervisory Approval & Date

CJ 5/9/79

C. Personal Contacts

- Cleanhouse Consultation (List CHs contacted, and indicate agreement/disagreement, state reasons for disagreement.)

EA agrees.

- Other Personal Contacts and Reactions

None.

(Cont'd on reverse side)

Disposition (Facility Use Only)

I. Implemented

Not Implemented

Awaiting Further Action

Send form to:

ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

FIGURE VIII-1-5: VOCABULARY DEVELOPMENT FORM
(Example of Completed New Term Recommendation)



VOCABULARY DEVELOPMENT FORM

D. Authorities Used

Citations of regularly used authorities may be copied onto the form.) Each authority used should be marked as X = Term Found, 0 = Term Not Found.

E. Impact on Treasury

Impact on Thesaurus
Indicate potential impact of this transaction on hierarchies and other terms in the Thesaurus. Consider, particularly, any overlap with other terms. Homographs should be qualified; occasionally, additional forms, revising older scope notes and disclaims, will need to be submitted in order to avoid indexing misuse.

Unambiguous. No overlap. Not a homograph.

E. Impact on Data Flow

Impact on the New Team

- SEARCH ATTACHED**

Magnet Schools Russell Conwell Middle Magnet School
Magnet Centers Magnet School Plan
Magnet Programs Conwell Middle Magnet School
Magnet Program

- * List all accession numbers to which the new term should be posted, excluding those posted by the Identifiers listed above. Precede by an asterisk (*) those accession numbers where the new term should be a main Descriptor.

ED016718 **ED064434** ***ED117206** **ED145054** **ED148969** ***ED156915** **ED178646** ***EJ203973**
ED019341 **ED078621** **ED117226** **ED145058** ***ED149454** **ED166314** ***ED181931** ***EJ207708**
ED041056 **ED094014** **ED130450** ***ED146313** **ED152905** **ED169172** ***EJ210203**
***ED064125** **ED116307** **ED137433** **ED146708** **ED152912** ***ED170423**

2 8mm

- Purge**

 - Attach search:
 - Show total postings: _____
 - Check one:
□ Transfer all postings to

- Transfer postings to _____, excluding:
(List accession numbers and show necessary manual reindexing for each.)

- Postings are not transferable.
(Attach 2nd form for invalid // "dead" term entry, or provide manual reindexing for all postings.)

space is required for any of these fields, additional sheets should be used and marked SHEET 1 of X, SHEET 2 of X, etc. Also, enter "(CONTINUED)" on the last line of each block that is continued on a following sheet, as in the following example:

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF	ACADEMIC PERFORMANCE (1966 1974)	Act.
	ACADEMIC PROGRESS	
	ACADEMIC SUCCESS	
	EDUCATIONAL ACHIEVEMENT	
	(CONTINUED)	

FIRST
SHEET

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF	EDUCATIONAL LEVEL	Act.
	SCHOLASTIC ACHIEVEMENT	
	STUDENT ACHIEVEMENT	

FOLLOWING
SHEET

b. Group Code

This field is limited to three (3) numeric characters only, i.e., one Descriptor Group Code.

c. Scope Note

The Scope Note/Definition field is limited to 370 characters including spaces. The form provides for that number of PICA characters between the end of the underscore following the keyword and the beginning of the shading on the fifth line. For ELITE typewriters, there are 370 spaces between the underscore and the vertical mark on the fifth line.

Because words may not be divided at the end of lines (i.e., no hyphenation), it is likely that some additional spaces will be available when the "end" marks are reached. Unused character spaces at the end of lines one through four can be used for continuation beyond the fifth line's end marks. In determining whether there are enough unused positions, remember that the computer system inserts a space after the last word in each line, so that if there are seven character spaces unused on a line, only six (6) are available for carryover use.

4. Adding New Term

A "/" or "X" should be entered in the "ADDING NEW TERM" box at the top of the form's front side, as shown:

- † ADDING NEW TERM
 - MODIFYING EXISTING TERM
 - † PURGING EXISTING TERM
- † See reverse side of form for special instructions.
 • Action Codes for Modifications Only.
 A - ADD C - CHANGE D - DELETE

This reminds the indexer (preparer) to check the back of the form for special instructions and alerts the Facility Lexicographer to the purpose of the submittal.

Note: The Action (Act.) boxes accompanying fields 2 through 7 are not used when adding a new term.

a. Main Term (Field #1)

Candidate Descriptors should conform, in both intellectual content and format, to the rules for Main Terms, item C.2.b of this section.

A candidate Descriptor is entered in field 1, as follows:

1. Main Term (50 Character Limit)

TERM_ COUNSELORS

b. Group Code (Field #2)

Each candidate Descriptor must be assigned a Group Code by the indexer submitting the form. The Group Code places the new term in one of forty-one broad subject categories called Descriptor Groups. A listing of the Descriptor Groups and Group Codes, and guidelines for selecting the one proper group for a new Descriptor, may be found in the rules for Descriptor Groups, item C.2.c of this section.

The selected 3-digit Group Code is entered in field 2, as follows:

2. Group Code	Act.
GROUP_240	<input type="checkbox"/>

c. Scope Note/Definition (Field #3)

Most new terms require accompanying Scope Notes. Absence of a Scope Note for a new term must be justified. Most information retrieval thesauri employ Scope Notes to restrict usage of potentially ambiguous terms. Because of the inherent "softness" or imprecision of educational

terminology and its overlap across many fields of study, ERIC carries definitional Scope Notes on all terms whose meanings are not self-evident. ERIC's Scope Notes should not be construed as formal definitions, but as indicators of how terms are (or should be) used in indexing. Instructional notations frequently are part of Scope Notes. These notations direct the *Thesaurus* user to other terms, indicate proper coordination, provide historical notes on changes in usage or cross-reference structure, or otherwise guide and explain preferred usage for both indexing and searching.

Scope Notes should be written in accordance with the guidelines and rules of item C.2.d of this section, as well as the following:

- Scope notes should be succinct. Keep the length of a Scope Note to the minimum consistent with clarity. Maximum length is 370 characters.
- While the system will accept lower case alphabetic characters, Scope Notes should be entered in all upper case to maintain consistency with existing entries.
- Be sure to examine the existing Scope Notes of related terms and other terms having the same component words as the candidate Descriptor. Don't "re-invent the wheel" when it is possible to borrow or adapt the work done by others.
- In preparing Scope Notes for new Descriptors, it is necessary to project the possible future applications of the concept in different contexts—to move beyond the applications found in existing documents and articles, to consider the potential development, expansion, or refinement of the concept in future years. Dictionaries and other authorities serve as checks against unnecessary restriction of a Descriptor's scope that might inhibit future applications.
- A minimum of three authorities must be cited for each definitional Scope Note prepared. More are desirable. It is strongly recommended that wherever a number of subject-specialized authorities exist, i.e., those directly relevant to the subject area or topic at hand, as many as possible should be consulted. All authorities consulted should be listed on the back side of the input form (block "D"), whether or not they contributed elements to a Scope Note or helped in its justification or support. The check marks X for "term found" and 0 for "term not found" (see block "D"), inform the Lexicographer that a particular authority was taken into consideration.

- As an aid to lexicographic analysis, submit copies of all definitions utilized in the wording of a Scope Note when these may not be readily available to the Lexicographer, e.g., pages from journal articles. Mark the appropriate passages. (If a microfiche reader/printer is not available and ERIC documents are cited, submit the ED number and the page or frame number.)

The Scope Note is entered in field 3, as follows:

1. Main Term (50 Character Limit)

TERM—ACCELERATION

3. Scope Note/Definition (370 Character Limit)

SCOPE—THE PROCESS OF PROGRESSING THROUGH AN EDUCATIONAL PROGRAM AT A RATE FASTER THAN THAT OF THE AVERAGE STUDENT (NOTE: FOR THE TIME RATE OF CHANGE OF VELOCITY, USE THE IDENTIFIER "ACCELERATION (PHYSICS)")

2. Group Code Act.
GROUP—310

1. Main Term (50 Character Limit)

TERM—LIBRARY SCIENCE

3. Scope Note/Definition (370 Character Limit)

SCOPE—STUDY AND PROFESSION OF THE ADMINISTRATION OF LIBRARIES AND THEIR CONTENTS -- INCLUDES THE PROCEDURES BY WHICH LIBRARIES RECOGNIZE, ACQUIRE, ORGANIZE, DISSEMINATE, AND UTILIZE INFORMATION

2. Group Code Act.
GROUP—710

1. Main Term (50 Character Limit)

TERM—OUT OF SCHOOL YOUTH

3. Scope Note/Definition (370 Character Limit)

SCOPE—CHILDREN OF COMPULSORY SCHOOL AGE WHO HAVE BEEN EXCUSED FROM ATTENDING SCHOOL, OR ADOLESCENTS OVER 16 YEARS OF AGE WHO ARE OUT OF SCHOOL LEGALLY

2. Group Code Act.
GROUP—510

1. Main Term (50 Character Limit)

TERM—SECOND LANGUAGES

3. Scope Note/Definition (370 Character Limit)

SCOPE—(NOTE: PRIOR TO MAR80, THE INSTRUCTION "FORIGN LANGUAGES, USE LANGUAGES" WAS CARRIED IN THE THESAURUS)

2. Group Code Act.
GROUP—450

d. Cross-References (Fields #4 - #7)

Necessary cross-references must accompany all new term recommendations. The Vocabulary Development Form carries these cross-references in the same order that they are found in the *Thesaurus*, thereby minimizing confusion both in structuring and evaluating a recommended display. ERIC uses the standard cross-references found in most contemporary information retrieval thesauri (compatible with those recommended by the American National Standards Institute—standard Z39.19-1974). These cross-references include the following:

(1) Used For (UF) Terms

See rules for UF (Used For)/USE References, item C.2.e.

A UF reference is a synonym or variant form of the main term and is not used in indexing. Its mandatory reciprocal is the USE reference. UFs are entered in field 4, as in this example:

1. Main Term (50 Character Limit)

TERM_ **HEALTH PERSONNEL** |

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF	COMMUNITY HEALTH WORKERS #	Act.
	HEALTH OCCUPATIONS PERSONNEL	
	HEALTH SERVICE PERSONNEL	
	HEALTH SERVICE WORKERS	
	HEALTH WORKERS	

The first entry in this example is followed by a pound sign (#), indicating a multiple UF and signifying that two or more main terms must be coordinated in order to index or retrieve that concept. Multiple UFs must be entered under each main term to be used in the coordination. In the above instance, a second Vocabulary Development Form is required, as follows:

1. Main Term (50 Character Limit)

TERM_ **COMMUNITY HEALTH SERVICES** |

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF	COMMUNITY HEALTH WORKERS #	Act.

(2) Narrower Terms (NT)

See rules for Narrower Terms (and Broader Terms), item C.2.f.

The NT represents an indexable subclass of the concept represented by the main term; the indexable NT achieves ERIC's goal of "subject-specific" indexing. Its mandatory reciprocal is the "Broader Term." NTs are entered in field 5, as in the following example:

1. Main Term (50 Character Limit)

TERM— MATHEMATICS

5. Narrower Terms

NT ALGEBRA

ARITHMETIC

CALCULUS

GEOMETRY

PROBABILITY

STATISTICS

TECHNICAL MAT

NTs are entered only at the next lower level of hierarchy. Terms such as ADDITION (NT to ARITHMETIC) and SOLID GEOMETRY (NT to GEOMETRY) are NOT entered in the case above.

Particular care must be taken, when inserting a new term into the midst of an existing hierarchical string, to remove existing generic references and avoid incorrect double entries. See item E.5.e.(3) for an explanation of how to deal with this problem.

(3) Broader Terms (BT)

See rules for Broader Terms (and Narrower Terms),
item C.2.f.

The BT represents the broad conceptual class into which a main term is placed. Each Broader Term is an indexable concept and the mandatory reciprocal of an NT. BTs are entered in field 6, as follows:

1. Main Term (50 Character Limit)

TERM—**PHYSICIANS**

6. Broader Terms

BT—**HEALTH PERSONNEL**

BT—**PROFESSIONAL PERSONNEL**

BTs are entered only at the next higher level of hierarchy. PERSONNEL, the BT to both HEALTH PERSONNEL and PROFESSIONAL PERSONNEL, is NOT entered in the above example. To do so would create the "invalid hierarchy" seen below. Illustrated also is the correct hierarchy in which PHYSICIANS appears twice; this is legitimate since there is no direct hierarchical relationship between HEALTH PERSONNEL and PROFESSIONAL PERSONNEL.

INVALID HIERARCHY

PERSONNEL

- .Health Personnel
- ..Physicians
- .Physicians
- .Professional Personnel
- ..Physicians

CORRECT HIERARCHY

PERSONNEL

- .Health Personnel
- ..Physicians
- .Professional Personnel
- ..Physicians

(4) Related Terms (RT)

See rules for Related Terms, item C.2.g.

The RT is an indexable concept that is closely associated with a main term, but is neither equivalent (UF/USE) nor hierarchical (NT/BT). Part-whole relationships, near-synonyms, and other conceptually related terms, of obvious benefit to indexers and searchers, appear as RTs. RTs are reciprocally related in the *Thesaurus*. They are entered in field 7, as shown below:

1. Main Term (50 Character Limit)

TERM—**TECHNOLOGY TRANSFER**

7. Related Terms

RT—**DIFFUSION**

- ECONOMIC PROGRESS
- INDUSTRIALIZATION
- INFORMATION DISSEMINATION
- INFORMATION UTILIZATION
- INNOVATION
- INVENTIONS
- LINKING AGENTS
- MARKETING
- PATENTS
- RESEARCH
- RESEARCH AND DEVELOPMENT CENTERS
- RESEARCH UTILIZATION
- TECHNICAL ASSISTANCE
- TECHNOLOGICAL ADVANCEMENT
- TECHNOLOGY
- USE STUDIES

Only relatively close relationships need be cross-referenced as RTs, and unnecessary proliferation should be avoided. See the guidelines in item C.2.g on avoiding RT proliferation.

e. Special Note on Cross-Reference Reciprocals

It is not necessary for the preparer of a Vocabulary Development Form to generate cross-reference reciprocals, as this is done automatically by the ERIC *Thesaurus* software. Examples of this capability follow:

<u>ENTERED VIA FORM</u>	<u>GENERATED VIA COMPUTER</u>
MANAGEMENT GAMES UF BUSINESS GAMES	BUSINESS GAMES USE MANAGEMENT GAMES
INTERACTION NT GROUP DYNAMICS	GROUP DYNAMICS BT INTERACTION
SPEECH BT LANGUAGE ARTS	LANGUAGE ARTS NT SPEECH
NEIGHBORHOODS RT SUBURBS	SUBURBS RT NEIGHBORHOODS

Of the examples in the right column, only the USE reference cannot also be entered via the input form. (USE references can only be generated reciprocally via the entry of a UF.) Even if a computer-generated NT, BT, or RT is also input inadvertently with a form, the *Thesaurus* software prevents invalid double entry of a term in a single field.

However, the software does not detect invalid cross-referencing of the same term in different fields (i.e., the same term could be filed both as an NI and BT, NT and RT, or BT and RT). If fact, a term can be cross-referenced with itself. Obviously, care must be taken to avoid these illogical relationships.

The software also prevents an existing UF from being filed as a main term, and vice versa; therefore, the above problem of double filing across fields does not extend to the UFs.

5. Modifying Existing Term

After a Descriptor has been entered into the *Thesaurus* file, it may be necessary to correct errors or omissions in its cross-references or to reflect subsequent changes in its application. Modifications to an existing term's Group Code,

Scope Note, and/or cross-references may be made by entering a "✓" or "X" in the "MODIFYING EXISTING TERM" box at the top of the Vocabulary Development Form's front side, as shown:

- ! ADDING NEW TERM
 - MODIFYING EXISTING TERM
 - ! PURGING EXISTING TERM
- ! See reverse side of form for special instructions.
• Action Codes for Modifications Only.
A - ADD C - CHANGE D - DELETE

This reminds the indexer (preparer) to use the Action Codes A, C, and D for recommending specific changes and alerts the Facility Lexicographer to the purpose of the submittal.

For all *Thesaurus* modifications, the preparer should indicate the main term and ONLY those elements of the term's display that he/she wishes to change. Elements not being changed should NOT be shown.

a. Action Codes

Action Codes are provided for the convenience of the preparer, permitting all add, change, and delete modifications recommended for a single Descriptor to be recorded on one Vocabulary Development Form. (In actuality, the *Thesaurus* system requires separate transactions for the add, change, and delete commands, and combinations of these must be separated and sequenced by the Lexicographer, as appropriate, before implementation.)

The Action (Act.) boxes on the form are used to record Action Codes. Use of each of the three (3) codes is described below.

(1) Add

The code for adding an element to a term's display is the letter A. This indicates that the coded item is to be entered in an empty field, or, if there are already entries in the field, that the coded item is to be added to these. The A code is most frequently used in the cross-reference fields (fields 4 through 7). It should be used in recommending a Scope Note (field 3) only when that field is not currently occupied. It cannot be used for a Group Code (field 2), since that field is never empty and accommodates a single code only.

(2) Delete

The code for deleting an element from a term's display is the letter D. This indicates that the coded item is to be deleted from the field it occupies. The D code is most useful for recommending the deletion of a specific cross-reference (fields 4 through 7). It can also be used to recommend the elimination of an existing Scope Note (field 3), when it has been determined that the Scope Note is unnecessary. It cannot be used for a Group Code (field 2).

(3) Change

The code for changing an entire existing field is the letter C. This indicates that ALL data existing in a particular field is to be removed and replaced with the new data provided on the Vocabulary Development Form. The C code is used most often to change a Group Code (field 2) or a Scope Note (field 3). However, it may also be used to recommend complete changes in cross-reference fields (fields 4 through 7), i.e., when the recommended changes are so extensive that it is easier to enter the result desired than to treat each entry separately. When using the C code, it is important to remember that ALL information that is to appear in the field must be included on the input form.

b. Group Code Changes

Recommended Group Code changes are entered using the C code. (A and D codes are never used for Group Code changes.) Example:

1. Main Term (50 Character Limit)	TERM_ <u>MICROCOUNSELING</u>	2. Group Code	Act.
		<u>GROUP_240</u>	<input checked="" type="checkbox"/> C

c. Scope Note Changes

The A code is used to recommend a Scope Note when one did not previously exist. Example:

1. Main Term (50 Character Limit)	TERM_ <u>PREREADING EXPERIENCE</u>	2. Group Code	Act.
3. Scope Note/Definition (370 Character Limit)	<u>SCOPE_ PRESCHOOL INCIDENTAL LEARNING THAT PREPARES CHILDREN FOR READING (NOTE: USE "READING READINESS" FOR FORMAL PREREADING TRAINING -- PRIOR TO SEP80, THE USE OF THIS TERM WAS NOT RESTRICTED BY A SCOPE NOTE)</u>		
	<input checked="" type="checkbox"/> A		

The C code is used to recommend the replacement of an existing Scope Note with a new Scope Note (provided on the form). Example:

1. Main Term (50 Character Limit) TERM <u>PROJECTS (1966 1980)</u>	2. Group Code GROUP <u>_</u> <input type="checkbox"/>	Act.
3. Scope Note/Definition (370 Character Limit) SCOPE <u>INVALID DESCRIPTOR -- SEE "PROGRAMS" AND ITS HIERARCHY (I.E., NARROWER TERMS "RESEARCH PROJECTS," "PILOT PROJECTS," ETC.)</u>		

The D Code recommends that the Scope Note on the form be expunged from the file. Example:

1. Main Term (50 Character Limit) TERM <u>ART TEACHERS</u>	2. Group Code GROUP <u> </u>	Act. <input type="checkbox"/>
3. Scope Note/Definition (370 Character Limit) SCOPE - <u>TEACHERS OF ONE OR MORE OF THE VISUAL ARTS</u>		

d. Used For (UF) Changes

Nonpostable "synonyms," i.e., USE references, may not be entered directly. The addition of a USE reference must be accomplished by submitting a form on the main term to which it will be cross-referenced. If, for example, it is desired to provide the entry MIDLIFE, USE MIDDLE AGED ADULTS, a form would be submitted as follows:

1. Main Term (50 Character Limit)	TERM— MIDDLE AGED ADULTS	I
4. Used For (i.e., Synonyms and Other Nonpreferred Terms)	UF—MIDLIFE	Act. A

The deletion of a USE reference is accomplished as follows:

1. Main Term (50 Character Limit)

TERM-AUTO MECHANICS

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF-SMALL ENGINE MECHANICS

Act.
D

If a USE reference is to be made a main term, a separate form deleting the USE reference must accompany the form for the new Descriptor. Also, the new Descriptor should be identified in its Scope Note as a former USE reference (see item D.5.d.).

In adding or deleting "multiple UFs," a separate Vocabulary Development Form must be prepared for each Descriptor used (or to be used) in the coordination. Additionally, each entry of a multiple UF on the forms must be followed by the pound sign (#).

e. Hierarchical (NT/BT) Changes

Extreme care should be exercised in making changes to Narrower and Broader Terms to ensure that hierarchical validity is maintained. The following examples will illustrate some of the problems that can occur and how they can be solved.

(1) Broader Term (BT) Changes

Assume that the term MEDICAL ASSISTANTS has the two BTs HEALTH PERSONNEL and PARAPROFESSIONAL PERSONNEL. Upon examination, it is determined that ALLIED HEALTH PERSONNEL would be the more appropriate BT, allowing the current BTs to be deleted since both appear in the ALLIED HEALTH PERSONNEL display. The required changes would be entered as follows:

1. Main Term (50 Character Limit)

TERM-MEDICAL ASSISTANTS

6. Broader Terms

BT-ALLIED HEALTH PERSONNEL

A
D
D

HEALTH PERSONNEL

PARAPROFESSIONAL PERSONNEL

Note that HEALTH PERSONNEL, BT to ALLIED HEALTH PERSONNEL, must be deleted to prevent an invalid double appearance of MEDICAL ASSISTANTS in the hierarchy. In the example, the same end result could have been accomplished as follows:

1. Main Term (50 Character Limit)

TERM MEDICAL ASSISTANTS

6. Broader Terms

BT ALLIED HEALTH PERSONNEL

C

Since the Change transaction first clears the field and then replaces it with the new information, it is not necessary to enter specific Deletes for HEALTH PERSONNEL and PARAPROFESSIONAL PERSONNEL.

(2) Narrower Term (NT) Changes

Assume that examination of the NTs for STUDENTS shows that STUDENT VOLUNTEERS has been omitted from the list, and that STUDENT TEACHERS erroneously carries both COLLEGE STUDENTS and STUDENTS as BTs. The required changes would be entered as follows:

1. Main Term (50 Character Limit)

TERM STUDENTS

I

5. Narrower Terms

NT STUDENT TEACHERS

D

STUDENT VOLUNTEERS

A

In this case, the Change transaction would not be used because of the large number of terms in this field that are being retained (i.e., not being changed). The result could, of course, have been accomplished by Broader Term changes to STUDENT TEACHERS and STUDENT VOLUNTEERS, but this would have required two input forms. Without additional modifications taking place, the above approach would be preferred.

(3) Hierarchical Insertions

When a new term is inserted in the middle of an existing hierarchical string, it is usually necessary to prepare a second Vocabulary Development Form in order to prevent invalid double entries in the hierarchy. For example, assume it becomes desirable to collect several of the NTs to ATHLETICS under a new Descriptor TEAM SPORTS. The NT/BT structure of the new term might be as follows:

If only this addition was made to the *Thesaurus* file, all of the NTs to TEAM SPORTS would show both that Descriptor and ATHLETICS as BTs, creating improper double references in the hierarchical display of ATHLETICS. Therefore, a second input form modifying ATHLETICS must accompany the one adding the new term. The modification, in this case, would appear as follows:

f. Related Term (RT) Changes

Recommendations for RT changes can be made by adding and/or deleting terms from the field as necessary.

1. Main Term (50 Character Limit)

TERM_VICTIMS OF CRIME

7. Related Terms

RT_DEATH	D
MALPRACTICE	A
PATIENTS	D
REHABILITATION	A
WAR	D

However, use of the Change transaction is advisable if extensive modifications are recommended:

1. Main Term (50 Character Limit)

TERM_DESIGN CRAFTS

7. Related Terms

RT_CERAMICS	C
CLOTHING DESIGN	
DESIGN	
FURNITURE DESIGN	
HANDICRAFTS	
INDUSTRIAL ARTS	
SKILLED OCCUPATIONS	

g. "Across-Field" Modifications

Care should be taken to avoid invalid double cross-references when moving terms between fields. Before cross-references are added to a field, each should be checked to assure they are not retained in another field. Across-field modifications can be entered on the same input form, as follows:

1. Main Term (50 Character Limit)		
TERM—INFORMATION DISSEMINATION		
6. Broader Terms		
BT—INFORMATION SERVICES		
INFORMATION UTILIZATION	A	D
7. Related Terms		
RT—INFORMATION SERVICES		
INFORMATION UTILIZATION	D	A

6. Purging Existing Term

A "purge" is used for recommending the total discontinuance of an indexable term. A "✓" or "X" should be entered in the "PURGING EXISTING TERM" box at the top of the Vocabulary Development Form's front side:

- † ADDING NEW TERM
 - MODIFYING EXISTING TERM
 - † PURGING EXISTING TERM
- † See reverse side of form for special instructions.
 • Action Codes for Modifications Only.
 A — ADD C — CHANGE D — DELETE

This reminds the indexer (preparer) to check the back of the form for special instructions and alerts the Facility Lexicographer to the purpose of the submittal.

After checking the purge box, the term to be purged is entered in Field #1, the "main term" line. Fields 2 through 7 are NOT used when purging a term. Example:

1. Main Term (50 Character Limit)	2. Group Code	Act.
TERM—DRAFTERS	GRDUP—	<input type="checkbox"/>

No other elements need be entered because a "purge" command automatically deletes a term's complete display and all of its reciprocal cross-references from the *Thesaurus* file.

Descriptor purges are based on, and necessitated by, one of two factors:

- (1) changes occurring in the literature of the system;
- (2) situations of ambiguity, synonymy, and inutility discovered in the vocabulary.

Because purges have an immediate and significant impact on searching, a decision or what to do with a term's postings must accompany all purge recommendations. The following alternatives are available, but, before considering them, the indexer should be familiar with the guidelines for Former Main Terms, item C.2.b.(5) of this section.

a. Transfer to New Term

This alternative is used for word form corrections, including the replacement of obsolete, incorrect, or unnecessarily specific terminology.

Examples: Transfer postings on MONGOLISM
to (new term) DOWNS SYNDROME

Transfer postings on MANPOWER DEVELOPMENT
to (new term) LABOR FORCE DEVELOPMENT

Transfer postings on NAVAHO
to (new term) NAVAJO

Transfer postings on WATER POLLUTION CONTROL
to (new term) WATER POLLUTION

Each of the above situations involves the creation of a new Descriptor, and two Vocabulary Development Forms are required to complete each transaction. In most cases, the need for purging a Descriptor and transferring its postings to a new word form can be demonstrated in an examination of the titles posted to the concept. Manual and online searches should be conducted to statistically test the validity of such changes. (Relying on one's indexing experience is not enough.) Statistical evidence and available supporting evidence from authorities should be gathered and submitted on the back of, or attached to, the Vocabulary Development Forms. Justification should include comments on the equivalency of the old and new expressions, and on shifts in emphasis and meaning.

Transferred Descriptors must be identified in the *Thesaurus* by parenthetical "life span" notations, e.g., "(1966 1980)." They are entered as UFs to the Descriptors to which they are transferred. Using the first example above, the Vocabulary Development Form for the new term DOWNS SYNDROME would include the following entries:

1. Main Term (50 Character Limit)

TERM_DOWNS SYNDROME

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF_DOWNS ANOMALY

MONGOLISM (1968 1978)

Act.

The UF DOWNS ANOMALY is a "carryover" from the former Descriptor MONGOLISM.

(See also "Transferred Descriptors" discussion under "UF (Used For)/USE References," item C.2.e of this section.)

b. Simple Merge

This alternative is used for the merging of synonyms, of near-synonyms (where one is not warranted or where the terms are synonymous for purposes of retrieval), and of very lightly posted terms.

Examples: Transfer postings on TEACHER RATING
to TEACHER EVALUATION

Transfer postings on UNEMPLOYED
to UNEMPLOYMENT

Transfer postings on GIRLS CLUBS
to YOUTH CLUBS

"Simple merge" transactions also require two Vocabulary Development Forms, one to first purge the unwanted term and a second to update the display of the retained term. The form for the retained (receiving) Descriptor should include a "life span" UF for the deleted term (see example of DOWNS SYNDROME and MONGOLISM above), any of the deleted term's UFs that are needed to maintain access, and any other cross-reference or Scope Note modifications that are needed to reflect conceptual changes stemming from the transfer. Copies of subject index pages, printouts of searches, and evidence from authorities should be attached to the input forms to demonstrate the usefulness of such changes. In the justification, the indexer should explain the retention/deletion decision and comment on the following as appropriate:

- statistical effect of the merger on future postings;
- any distinguishing differences in meaning or usage between the terms; and
- possibilities for separate retrieval online where differences exist.

(See also discussion on synonymity, "Is It a Synonym?," item D.4 of this section.)

(SPECIAL NOTE: The mere fact of infrequent use is not an adequate justification for purging a lightly posted term. Unless lightly posted terms can be transferred to other meaningful Descriptors without information loss, it is usually best to leave them alone.)

c. Multiple Merge

This alternative is used to eliminate multiple synonyms or to gather several lightly posted NTs under an existing or new BT.

Examples: Transfer postings on FOOD SERVICE INDUSTRY, FOOD SERVICE OCCUPATIONS, and FOOD SERVICE WORKERS to FOOD SERVICE

Transfer postings on GROUPING PROCEDURES, SORTING PROCEDURES, TAXONOMY, and TYPOLOGY to CLASSIFICATION

A separate Vocabulary Development Form is required for each term involved in a multiple merge transaction, whether being purged or retained. As with alternatives "a" and "b" above, "life span" UFs must be included on the forms of the retained Descriptors, as well as necessary "carryover" cross-references and other data from the deleted displays. Justification should include statistical evidence from the postings and definitional/structural evidence from authorities.

d. Term Split

This alternative allows the transfer of low-use terms to two (or more) more general terms, when a one-to-one transfer (either to a BT or RT) would result in information loss. The receiving terms can then be coordinated to retain specificity.

Examples: Transfer COMMUNITY SCHOOL DIRECTORS to ADMINISTRATORS and COMMUNITY SCHOOLS

Transfer AFTER SCHOOL TUTORING to AFTER SCHOOL EDUCATION and TUTORING

Transfer BOOK THEFTS to BOOKS and STEALING

Again, a separate Vocabulary Development Form must be prepared for each term involved. However, this type of transaction requires that the UF for the purged Descriptor be entered as a new "multiple UF," as in the following example:

1. Main Term (50 Character Limit)

TERM—AFTER SCHOOL EDUCATION

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF—AFTER SCHOOL TUTORING (1966 1980) #

Act.

A

1. Main Term (50 Character Limit)

TERM—TUTORING

4. Used For (i.e., Synonyms and Other Nonpreferred Terms)

UF—AFTER SCHOOL TUTORING (1966 1980) #

Act.

A

(Note that on both input forms, the A action code was used because the receiving terms are existing Descriptors.)

(See discussion on "Multiple UFs" in item C.2.e of this section.)

In justifying "term splits," the preparer should comment on other alternatives for transfer and the reasons for wanting the "multiple UF," the appropriateness of the postings to each of the recipient terms, and the effects of the "multiple UF" on manual retrieval.

e. Postings Split

This alternative is used when an existing term has been employed for different concepts, either because it is a homograph or because of indexing misuse.

Examples: Transfer postings on FRESHMEN
to either COLLEGE FRESHMEN or
HIGH SCHOOL FRESHMEN

Transfer postings on ANIMAL SCIENCE
to either ANIMAL HUSBANDRY or ZOOLOGY

Every "postings split" requires some manual reindexing. Before this can occur, however, the postings for each indexable meaning of a "split" must be isolated. For example, the records posted to FRESHMEN would need to be separated into at least two sets—those pertaining to COLLEGE

FRESHMEN and those pertaining to HIGH SCHOOL FRESHMEN. Online searching is required for isolating these sets; the following search strategies might be employed:

Set #1—COLLEGE FRESHMEN

FRESHMEN and (HIGHER EDUCATION or TWO YEAR COLLEGES or COLLEGE STUDENTS or TWO YEAR COLLEGE STUDENTS)

Set #2—HIGH SCHOOL FRESHMEN

FRESHMEN and (HIGH SCHOOLS or JUNIOR HIGH SCHOOLS or HIGH SCHOOL STUDENTS or JUNIOR HIGH SCHOOL STUDENTS or GRADE 9)

The possibility of some records that pertain to multiple subsets of meaning (in this example, to both Set #1 and Set #2) should not be overlooked, i.e.:

Set #3—Both COLLEGE FRESHMEN and HIGH SCHOOL FRESHMEN

(Set #1 Results) and (Set #2 Results)

Since the precision of search "hits" is dependent on the search strategy employed, as well as the original indexing, it is always best to "eyeball" the individual records in each set to ensure their accuracy. Once this check and necessary adjustments are made, the preparer of the Vocabulary Development Form can list his/her recommendations for manual reindexing. This may be done on the back of the form (under the check box that reads "transfer postings to _____, excluding: _____") or on the copy of the search submitted with the form.

Assume that the three searches on FRESHMEN produced the following numbers of hits: 100 in Set #1, 40 in Set #2, and 10 in Set #3. Sets #2 and #3 have fewer hits and are, therefore, the logical choices in this example for manual reindexing. Thus, FRESHMEN needs to be deleted from, and HIGH SCHOOL FRESHMEN added to, each record in Sets #2 and #3. Other indexing errors and inconsistencies in these records could, of course, be recommended as well. Four sets of transactions are normally required for manual reindexing: Delete EDs, Delete EJs, Add EDs, and Add EJs. An example for each set is given below:

DELETE EDxxxxxx
DESC_Freshmen

DELETE EJxxxxxx
DESC_Freshmen; High School Students

ADD_EDxxxxxx
DESC_High School Freshmen

ADD_EJxxxxxx
DESC_*High School Freshmen; High Schools
IDEN_Florida; *As You Like It

Delete transactions need not show whether a term is major or minor, i.e., preceded or not preceded by an asterisk (*); all asterisks are ignored by the Delete transaction process. Add transactions, on the other hand, must include the asterisk if the Descriptor (or Identifier) is to be a major term in the reindexed record. In the above examples, HIGH SCHOOL FRESHMEN will be a minor Descriptor in the ED (RIE) record and a major Descriptor in the EJ (CIJE) record. Terms other than FRESHMEN and HIGH SCHOOL FRESHMEN in these examples represent typical additional reindexing recommendations desired by the reviewer (preparer of the Vocabulary Development Form).

All recommended manual reindexing is reviewed by the Facility lexicographic staff and, when approved, is keyed, proofed, and released to the ERIC master files. Continuing with the example of FRESHMEN, once manual reindexing for the 50 hits of Sets #2 and #3 is accomplished, the remaining 100 hits in Set #1 can be updated using ERIC's "Transfer-and-Delete" program. This program requires only one transaction to remove FRESHMEN from the 100 remaining records and to add COLLEGE FRESHMEN to each, while retaining major/minor designators intact.

All manual reindexing recommendations for postings splits should accompany the Vocabulary Development Forms submitted for the terms to be purged. Additional forms are required to retain the transferred Descriptors as USE references. Terms whose postings are split should be entered as USE references in one of two ways:

- A "split" homograph is entered as a UF under all of the other Descriptors that were used to break down its postings and multiple meanings. Split homographs carry parenthetical life span notations as other transferred Descriptors do. Additionally, however, each must carry a second qualifier that will limit its meaning to the particular context of the main term or Descriptor under which it is entered.

The following examples show the ultimate disposition of the split homograph FRESHMEN:

Indexer-Generated UFs
(entered on Vocabulary Development Forms)

COLLEGE FRESHMEN
UF FRESHMEN (1967 1980)
(FIRST YEAR COLLEGE STUDENTS)

HIGH SCHOOL FRESHMEN
UF FRESHMEN (1967 1980)
(GRADE 9)

Computer-Generated Reciprocals

FRESHMEN (1967 1980)
(FIRST YEAR COLLEGE STUDENTS)
USE COLLEGE FRESHMEN

FRESHMEN (1967 1980)
(GRADE 9)
USE HIGH SCHOOL FRESHMEN

Definitional qualifiers for split homographs always follow the life span notations. This structure is used because such qualifiers were not part of the original Descriptors. (Qualifiers that were part of original Descriptors precede the life span notations.)

- Purged terms whose postings are split because of misuse in indexing should normally be carried as single or multiple UFs under those Descriptors that best reflect how the purged terms should have been used (had they been used correctly). The purged Descriptor ANIMAL SCIENCE is an example of this situation.

ANIMAL SCIENCE is a branch of agriculture concerned with "producing animals and animal products for economic and other uses" (Combined Glossary, National Center for Education Statistics, 1974). It had been structured in the AGRICULTURE hierarchy of the ERIC *Thesaurus* and should have been used exclusively in that sense. Its usage by indexers for the biological science of ZOOLOGY is not supported by lexicographic authorities nor by the educational literature. ANIMAL SCIENCE, therefore, cannot be considered as a "split" homograph, although its former postings were split between ANIMAL HUSBANDRY and ZOOLOGY. Only one USE reference presently appears in the *Thesaurus* to indicate the existence of this former Descriptor, i.e.:

ANIMAL HUSBANDRY
UF ANIMAL SCIENCE
(1967 1980)

ANIMAL SCIENCE (1967 1980)
USE ANIMAL HUSBANDRY

This single USE reference may not tell the whole story of this former Descriptor's usage, but additional *Thesaurus* entries for the term are not justified by either authorities or the literature.

f. "Dead" or Invalid Term Option

This option is used for purging unwanted Descriptors that, because of inconsistent usage over time, are not readily transferrable. "Dead term" status puts a hold on former Descriptors, preventing their further use in indexing and allowing them to be set aside for examination and possible reindexing at a later date.

A minimum input of two Vocabulary Development Forms is required. One form is used for the purge transaction (see back of form for check box that reads "postings are not transferrable"). The term is then reentered on the second form as an invalid/"dead" Descriptor, e.g.:

- ↑ ADDING NEW TERM
 - MODIFYING EXISTING TERM
 - ↑ PURGING EXISTING TERM

1. Main Term (50 Character Limit) TERM <u>READING LEVEL (1966 1980)</u>	2. Group Code GROUP <u>460</u>	Act. <input type="checkbox"/>
3. Scope Note/Definition (370 Character Limit) SCOPE <u>INVALID DESCRIPTOR -- USED FOR BOTH THE READING LEVEL OF PEOPLE AND THE READABILITY LEVEL OF MATERIALS -- SEE "READING ACHIEVEMENT" AND "READABILITY" RESPECTIVELY FOR THESE CONCEPTS</u>		

Since their postings have not been transferred, invalid Descriptors are reentered as main terms rather than as UFs. Like transferred Descriptors, invalid Descriptors carry life span notations, which indicate the period of time these terms were used in indexing, make their "dead" status easily identifiable in all *Thesaurus* displays, and effectively prevent their further use in indexing. Also, like other main terms, invalid Descriptors are assigned to one of the Descriptor Groups and carry Scope Notes intended to lead indexers and searchers to more precise or meaningful terminology. Unlike other main terms, however, invalid Descriptors carry none of the standard *Thesaurus* cross-references (i.e., no UFs, NTs, BTs, nor RTs). (See item E.4, parts a, b, and c of this section for additional information.)

Although invalid Descriptors carry no standard cross-references, retrieval considerations sometime necessitate a reference to an invalid Descriptor in a preferred term's Scope Note. In the case of READING LEVEL, two additional Vocabulary Development Forms were prepared and submitted for this purpose, as follows:

1. Main Term (50 Character Limit)

TERM READABILITY

2. Group Code

GROUP

Act.

3. Scope Note/Definition (370 Character Limit)

SCOPE THE QUALITY OF READING MATTER THAT MAKES IT INTERESTING AND UNDERSTANDABLE TO THOSE FOR WHOM IT IS WRITTEN (NOTE: PRIOR TO JUN80, "READING DIFFICULTY" AND "READING LEVEL" WERE OCCASIONALLY USED TO INDEX THIS CONCEPT)

Act. **C**

1. Main Term (50 Character Limit)

TERM READING ACHIEVEMENT

2. Group Code

GROUP

Act.

3. Scope Note/Definition (370 Character Limit)

SCOPE LEVEL OF ATTAINMENT IN ANY OR ALL READING SKILLS, USUALLY ESTIMATED BY PERFORMANCE ON A TEST (NDTE: PRIOR TO JUN80, "READING LEVEL" WAS OCCASIONALLY USED TO INDEX THIS CONCEPT)

Act. **A**

Both READABILITY and READING ACHIEVEMENT were in the *Thesaurus* at the time READING LEVEL was made invalid; thus, the above entries were handled as "change" transactions (with a check in the box that reads "modifying existing term"). Notice the action codes "C" and "A" where "C" indicates a replacement Scope Note, while "A" is used to add a Scope Note where none existed previously. Also, notice the reference to READING DIFFICULTY in the READABILITY Scope Note; during the same *Thesaurus* update, both READING DIFFICULTY and READING LEVEL were made invalid because of inconsistent usage.

(See also discussions on "Invalid 'Dead' Descriptors" under "Main Terms" and "Ambiguous Usage" under "Scope Notes" in item C.2 of this section.)

g. Transfer to Identifier Field

This alternative permits those Descriptors, which hindsight shows are more suitable as Identifiers, to be reposted to the Identifier Field. There are several situations where this action is appropriate, i.e.:

- Highly specific proper nouns.

Example: Move postings of CHAUTAUQUAS to Identifier Field

- Coined terminology.

Example: Move postings of NUCLEATION (LANGUAGE LEARNING) to the Identifier Field

- Synonym of a "true" Identifier.

(Note: A true Identifier is a subject concept used in indexing that does not qualify as a Descriptor—see item D.2 of this section.)

Example: Transfer the Descriptor SOUTHERN STATES to the Identifier UNITED STATES (SOUTH)

Only one Vocabulary Development Form is needed for Descriptor-to-Identifier transfers. The form should reflect the purge transaction, accompanied by specific transfer instructions and justification information that explains why the term is not a suitable Descriptor.

Descriptors transferred to Identifier synonyms are added as UFs to the Identifier Authority List (IAL) by the Facility lexicographic staff. Such UFs, like Descriptor transfers within the *Thesaurus*, carry life span notations. Scope Notes reflecting such transfers may also be added to the IAL, particularly if the former Descriptor was heavily posted. The following example shows typical IAL entries for such changes:

Example: United States (South)	(Facility Lexicographers enter these changes)
SN (Note: Prior to Mar80, "Southern States" was a Descriptor)	
UF Southern States (1966 1980)	
Southern States (1966 1980)	(Computer-Generated Reciprocal)
USE United States (South)	

Descriptor-to-Identifier transfers are extremely rare, comprising fewer than 10 instances in ERIC's first 15 years. Another purge alternative is almost always more suitable.

h. Simple Delete

A final alternative for purging a Descriptor is to expunge all references to it from the *Thesaurus* and all of its postings from the data base. Like Descriptor-to-Identifier transfers, "simple deletes" are generally not recommended and should be restricted to the following instances:

- Little-used ambiguous terms that encompass no appreciable subject content.

Examples: ADVANCED SYSTEMS; LIMITED EXPERIENCE; NONFARM YOUTH.

- Little-used highly specific terms whose existence cannot be justified because there is little or no data in ERIC on the subjects they represent.

Examples: BIRACIAL GOVERNMENT; CABINET TYPE PROJECTORS; HORIZONTAL TEXTS.

Only one Vocabulary Development Form is required for a "simple delete." However, a search must be attached that shows that each individual posting of the term was checked for alternate retrievability. Other Descriptors should be recommended for all records that need compensatory reindexing.

7. "Justification Information" Section

This section of the Vocabulary Development Form lists the requirements for justifying all *Thesaurus* transactions (whether new term, change, or purge). As an aid to the preparer, specific instructions accompany some of the information blocks. There are six information blocks, labeled A-F.

a. Indexer & CH

Preparer's name and organizational affiliation are entered. For Clearinghouses, enter indexer's name and Clearinghouse prefix.

A. Indexer & CH
John R. Doe, TM

b. Supervisory Approval & Date

Preparer's supervisor signs and dates the form. For Clearinghouses, the form must be examined by and have the signature of the Clearinghouse Vocabulary Coordinator (or his/her designated representative).

B. Supervisory Approval & Date
William K. Brooks 5/4/81

c. Personal Contacts

This block is subdivided into "Clearinghouse Consultation" and "Other Personal Contacts." Education encompasses wide-ranging subject fields, and ERIC is responsible to a highly diversified user community. Adequate consultation on *Thesaurus* transactions among ERIC's subject-speciality Clearinghouses is necessary in order to avoid parochial points of view. Any transactions on a particular term must be considered from the viewpoints of all those Clearinghouses that may frequently use the term or whose scope areas cover the subject conveyed by the term. Subject specialists, within or outside a particular Clearinghouse, are often contacted with reference to *Thesaurus* transactions. The form reminds the preparer to list such contacts and give their reactions.

The form should list individuals contacted at Clearinghouses, if other than designated Vocabulary Coordinators. Addresses and phone numbers of consultants outside of the Clearinghouses should be provided for lexicographic followup when necessary.

C. Personal Contacts
• Clearinghouse Consultation
(List CHs contacted, and indicate agreement/disagreement; state reasons for disagreement.)

EA, HE, and SE agree.

• Other Personal Contacts and Reactions

Scope Note recommended by:
Linda E. Littlejohn
Dept. of Psychology
Univ. of XYZ

(214) 678-9100

d. Authorities Used

Authorities must always be cited for new Descriptors, or for redefining or merging existing Descriptors. Preparers should list all dictionaries, glossaries, and ERIC documents used in preparing Scope Notes, as well as the thesauri used to structure a term's display. The ERIC Facility maintains a "Thesaurus Bibliography" of frequently cited terminological references (see item B.6, "Lexicographic Authorities"). A minimum of three authorities must be cited for each definitional Scope Note prepared (see item E.4.c, "Scope Note/Definition (Field #3)").

Each Clearinghouse should copy its regularly used, core authorities on its copies of the form to avoid retyping the same citations every time a form is completed. Citations, particularly of well-known authorities, may be abbreviated, and each should include the edition or year of publication. In reproducing core authorities on the form, Clearinghouses should leave a number of blank spaces so that sources used less frequently, and special sources such as specific ERIC documents and journal articles, can be written or typed in as needed.

Each authority examined for a specific transaction should be marked "X" or "0" ("Term Found" or "Term Not Found"). In this way, the Lexicographer at the Facility can avoid unnecessary rechecking of authorities that the preparer of the form has already checked. Copies of pertinent sections of journal articles and other special sources cited should be submitted with the form, as these may not be readily available to the Lexicographer; appropriate passages on these copies should be marked. (See also item E.4.c.)

D. Authorities Used (Citations of regularly used authorities may be copied onto the form.) Each authority used should be marked as X - Term Found. 0 = Term Not Found	
<input type="checkbox"/> Good, 1973	<input type="checkbox"/> Webster's III
<input checked="" type="checkbox"/> Page & Thomas, 1977	<input type="checkbox"/> Random House Unabridged, 1966
<input checked="" type="checkbox"/> NCES, Combined Glossary, 1974	<input checked="" type="checkbox"/> SPINES Thesaurus, 1976
<input checked="" type="checkbox"/> English & English, 1958	<input type="checkbox"/> Population/Family Planning Thesaurus, 1978
<input checked="" type="checkbox"/> Wolman, Dict. of Behavioral Science, 1973	<input type="checkbox"/> Child Abuse & Neglect Thesaurus, 1980
<input type="checkbox"/> Gould & Kolb, Dict. of the Social Sciences, 1964	<input type="checkbox"/> Library of Congress Subject Headings, 9th
<input checked="" type="checkbox"/> UNESCO:IBE Education Thesaurus, 1977	<input type="checkbox"/> National Criminal Justice Thesaurus, 1980
<input checked="" type="checkbox"/> UNESCO Thesaurus, 1977	<input type="checkbox"/> NICSEM Special Education Thesaurus, 2d ed
<input type="checkbox"/> EUDISED Multilingual Thesaurus, 1973	<input checked="" type="checkbox"/> ED181016 -- "Ability Grouping and Students' Self-Esteem"
<input type="checkbox"/> Foskett & Foskett, London Education Classification, 1974	<input checked="" type="checkbox"/> American Education, 8th ed., p. 145
<input type="checkbox"/> Psych. Abstracts Thesaurus, 1977	<input type="checkbox"/>

e. Impact on Thesaurus

This information block asks the preparer to consider the basic pitfalls of a typical vocabulary transaction. These include homographs, overlapping concepts, and invalid hierarchical insertions. Thoughtful consideration of the factors listed on the form should help avoid indexing misuse and searching problems.

E. Impact on Thesaurus

Indicate potential impact of this transaction on hierarchies and other terms in the Thesaurus. Consider, particularly, any overlap with other terms. Homographs should be qualified; occasionally, additional forms, revising older scope notes and displays, will need to be submitted in order to avoid indexing misuse.

Candidate Descriptor is specific, unambiguous, and needed to index a concept appearing frequently in the contemporary literature of vocational education.

See attached search.

f. Impact on Data Base

The last "justification information" block covers the basic procedures that are necessary to assure compatibility at all times between the *Thesaurus* and the ERIC data base. This compatibility is a stated ERIC policy (see item B.5, "Synchronization of Lexicography and Indexing") and represents a practice that is not often seen among other major data base systems.

Where practicable, a comprehensive update of the data base backfile is made whenever a *Thesaurus* term is either added or deleted. These updates lessen the complexities of computer searching, enhance retrieval, and promote user satisfaction with search results. Essentially, each preparer of a Vocabulary Development Form, usually a Clearinghouse indexer, is asked to do a computer search before finalizing his/her recommendation. The perspective of the searcher is an ingredient in all successful indexing, and the practice of researching *Thesaurus* transactions on the computer undoubtedly results in better indexing.

This practice, of course, requires that indexers have ready access to a computer terminal. Users who are interested in recommending a *Thesaurus* change but without ready online access to the ERIC data base are requested to contact the Facility Lexicographer for assistance.

The following illustration shows the results of a typical comprehensive search for a new term recommendation. The new term in this case is MAGNET SCHOOLS. Seven (7) functions were performed in order to obtain these results:

1. Find word "magnet" in the Identifier Field.
2. Eliminate (manually) Identifiers retrieved that do not fit the Scope Note of MAGNET SCHOOLS (e.g., any pertaining to metallic attraction).
3. Repeat step #1 full-text (e.g., for titles and abstracts).
4. "Not out" step #1 results from step #3 results.
5. Repeat step #2 on results of step #4.
6. Evaluate the records remaining after step #5 to determine whether MAGNET SCHOOLS should be major or minor.
7. List results of step #2 (second bullet below) and step #6 (third bullet below).

F. Impact on Data Base

1. New Term

- Attach full-text search, including strategy. Do not limit the search (i.e., by Cleaninghouse, by RIE or CUE, etc.). SEARCH ATTACHED
- List Identifiers to be transferred to new term. Include all variations. It is unnecessary to also list accession numbers to which the Identifiers are posted.

Magnet Schools	Russell Conwell Middle Magnet School
Magnet Centers	Magnet School Plan
Magnet Programs	Conwell Middle Magnet School
Magnet Program	

- List all accession numbers to which the new term should be posted, excluding those posted by the Identifiers listed above. Precede by an asterisk (*) those accession numbers where the new term should be a major Descriptor.

ED016718	ED064434	*ED117206	ED145054	ED148969	*ED156915	ED178646	*EJ203973
ED019341	ED078621	ED117226	ED145058	*ED149454	ED166314	*ED181931	*EJ207708
ED041056	ED094014	ED130450	*ED146313	ED152905	ED169172		*EJ210203
*ED064125	ED116307	ED137433	ED146708	ED152912	*ED170423		

The second part of this information block is used for delineating purge recommendations. There are eight alternatives for dealing with the postings of purged Descriptors, each of which is explained under item E.6, "Purging Existing Term." A choice among these alternatives will determine which among the form's three check boxes is appropriate. The example below shows a one-to-one transfer between two existing terms. As the example illustrates, liberal use of the form may be made for explanations and other notes.

2. Purge

- Attach search.
- Show total postings: 28

• Check one: ✓
OK Transfer all postings to DRAFTING (has 216 postings, overlapping with DRAFTERS 12 times -- total after merge will be 232)
excluding:

- Transfer postings to _____
(List accession numbers and show necessary manual reindexing for each.)

- Postings are not transferable.
(Attach 2nd form for invalid/"dead" term entry, or provide manual reindexing for all postings.)

8. Transmittal of Form

All completed Vocabulary Development Forms should be transmitted as they occur to the address at the bottom of the form's front side, i.e.:

Send form to:

ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

To avoid processing delays, do not include Vocabulary Development Forms with RIE or CIJE shipments to the ERIC Facility.

Originators, whether Clearinghouses or external users, should retain copies of all Vocabulary Development Forms and attachments for reference in case coordination is necessary.

9. ERIC Facility Processing

Upon receipt of a Vocabulary Development Form, the Facility Lexicographer performs a preliminary review to ensure compliance with the *ERIC Processing Manual*. If there is a significant problem, the originator of the input is contacted prior to entering the recommendation in the monthly *Vocabulary Status Report* (VSR). The VSR is a listing of all *Thesaurus* recommendations and serves as the medium for Vocabulary Review Group (VRG) evaluation and feedback. Recommendations approved by the VRG are entered in the *Thesaurus* and the ERIC data base by the Facility lexicographic staff. The staff also prepares a monthly summation entitled "*Thesaurus Changes and Statistical Data*," which serves as a *Thesaurus* supplement. All of these procedures are fully discussed in item "F" of this section, "Vocabulary Development Program," which follows.

F. Vocabulary Development Program

The flow of the Vocabulary Development Program is illustrated in Figure VIII-1-6.

The Vocabulary Development Program is a procedure for coordinating and implementing changes to the ERIC *Thesaurus*. Initiated in December 1980, the program grew out of ERIC's experience with the Vocabulary Improvement Project (VIP) and the *Play Thesaurus*. (See items C.1.h and C.1.i of this section, and also item B.3.) As in the past, the emphasis continues to be on total network involvement in *Thesaurus* development, but with a streamlined approach.

1. One basic procedure and one form are used for the submission and review of all proposed changes to the ERIC *Thesaurus*. (In the past, new Descriptors and modifications to the existing *Thesaurus* were treated separately and required separate forms.)

The characteristics and uses of the Vocabulary Development Form are covered in item "E" of this section.

2. ERIC Clearinghouses and selected users are given the opportunity to review all proposed changes and additions prior to final review/implementation by the Facility lexicographic staff.
3. A Vocabulary Review Group (VRG) of 24 members serves as the one review/advisory group for the Vocabulary Development Program. (The original 36-member VRG and the *Thesaurus* Advisory Panel (see item C.1.f) have been abolished.) In addition to reviewing specific recommendations for changes and new terms, the VRG is responsible for evaluating vocabulary-related policy matters and for recommending viable alternatives for long-range *Thesaurus* development. The VRG membership includes:

- 16 - ERIC Clearinghouse Coordinators
- 1 - Facility Lexicographer (also, the Facility Identifier Coordinator is an "ex officio" member)
- 1 - CIJE/*Thesaurus* Contractor
- 1 - Central ERIC Monitor
- 5 - User Representatives:
Representative of the ERIC Online Project; staff member of an online search facility; a university librarian; a school librarian (manual search facility); and an educational practitioner.

4. The term of office for each user member, except the ERIC Online Project representative, is 2 years. The 2-year terms are such that the practitioner and representative of the online search facility are appointed by Central ERIC in December of odd-numbered years; the school and university librarians are appointed by Central ERIC in

ERIC Vocabulary Development

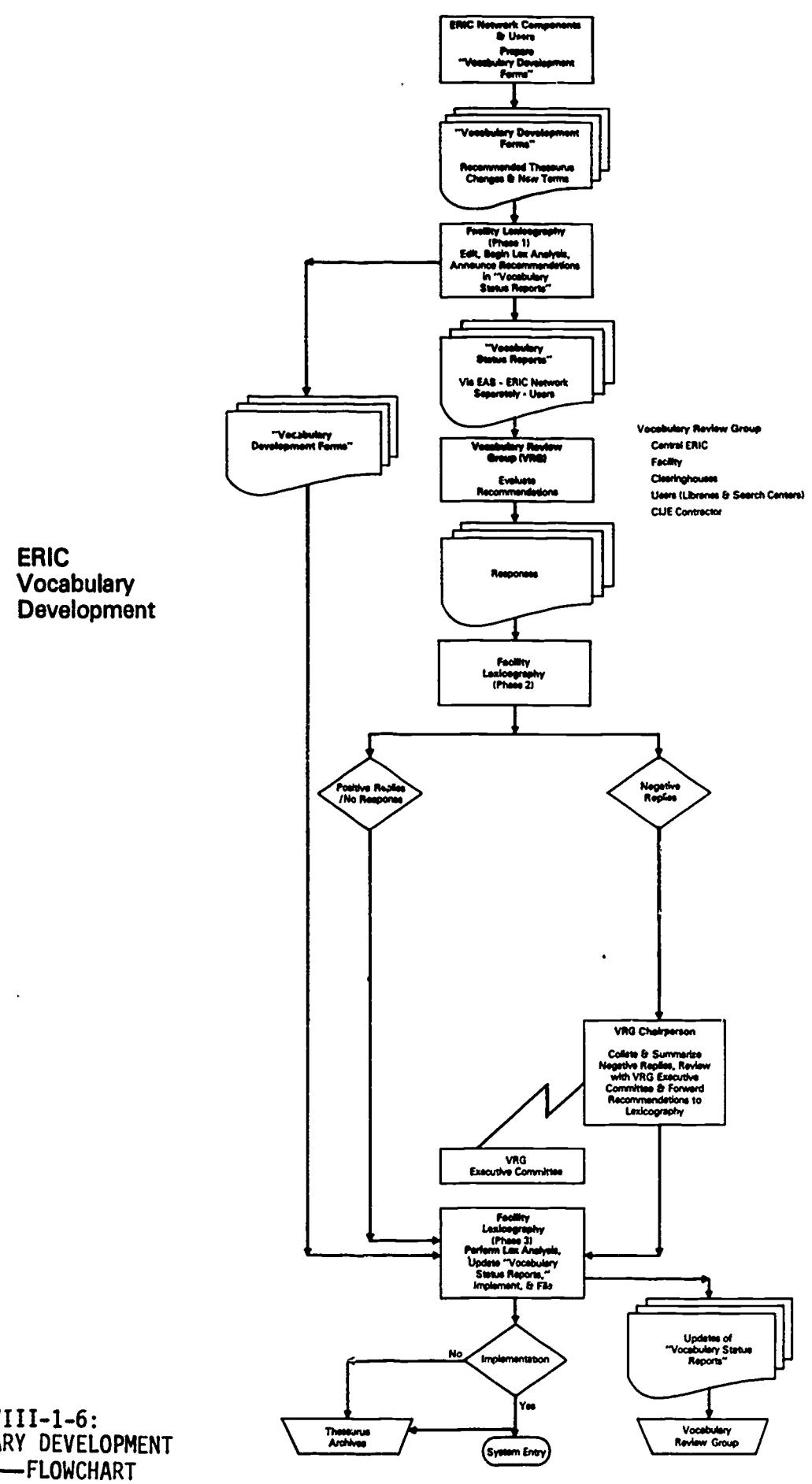


FIGURE VIII-1-6:
VOCABULARY DEVELOPMENT
PROGRAM—FLOWCHART

December of even-numbered years. The Coordinator of the ERIC Online Project is a permanent representative on the VRG. All other VRG membership is also permanent. Clearinghouse directors are responsible for selecting the Clearinghouse representatives.

5. The VRG Executive Committee is composed of the VRG Chair, the Facility Lexicographer, and the Central ERIC Monitor. The purpose of this committee is to resolve any problems/conflicts identified by the larger review group.
6. The VRG is chaired by a Clearinghouse Coordinator appointed by Central ERIC. The Chair of the VRG assumes the following responsibilities:
 - Coordinate activities of the VRG and act as liaison among Facility, Clearinghouses, users, and Central ERIC.
 - Receive from the Facility lexicographic staff all negative comments from VRG members pertaining to proposed *Thesaurus* changes.
 - Collate and summarize those negative responses.
 - Arrange monthly coordination sessions with the VRG Executive Committee to assess negative responses, calling for the assistance of other Clearinghouse Coordinators on an "ad hoc" basis.
 - Prepare final recommendations for Facility Lexicographer.
7. Facility Lexicography prepares a monthly *Vocabulary Status Report* summarizing all recommended *Thesaurus* changes received during a one month period from Clearinghouses and external users. Brief annotations, e.g., Scope Notes for new terms, accompany each change listed on the status report form (see example in Figure VIII-1-7). The status report serves as the mechanism for alerting the VRG to proposed changes and for soliciting the membership's comments and recommendations. Reviewers may comment directly on the form and/or attach more extensive comments. Return of copies from the VRG is scheduled within a month of a particular report's distribution. Two copies are returned to the lexicographic staff—one goes into the ERIC lexicographic archives and the other is forwarded to the VRG Chair for final review and summation of voting. The final disposition of each recommended change is included in an updated status report that is redistributed to the VRG (see example in Figure VIII-1-8). Additional VRG review may occasionally be necessary if there are contested dispositions.
8. The review cycle for the Vocabulary Development Program, from receipt to disposition, is 2-3 months.
9. The membership of the VRG is announced periodically in the *Interchange* newsletter in order to encourage ERIC users interested in accomplishing additions of new *Thesaurus* terminology, or those encountering other difficulties in subject searching, to interact with the VRG.



VOCABULARY STATUS REPORT

PLEASE VOTE AND RETURN THIS PAGE

Page: 10 of 12

Date: March 1981

ENTRY NUMBER	descriptor and description of recommended action	New Term	Change	Purge	Originator	Date Received	VRG*		Date of Disposition		REVIEWER'S REMARKS (Please detail any objections; use back of form, if necessary.)	ELAPSED TIME
							Agree	Do Not Agree	Implemented **	Not Implemented		
1066	PREWRITING SN: All activities immediately preceding the first draft of a written work	X			CS	3/81						
1067	WRITING EVALUATION SN: Objective or subjective procedures for describing, appraising, or judging written language UF: Writing Assessment	X			CS	3/81						
1068	SELECTIVE DISSEMINATION OF INFORMATION SN: An information service, often computer-based, that distributes notices of relevant information to subscribers by matching recent acquisitions with their interest profiles UF: Current Awareness Services; SDI	X			IR	3/81						

*Return 2 Copies By: To: ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014
April 17, 1981

Reviewer/Organization

** Term may be used for indexing as of this date.

FIGURE VIII-1-7: VOCABULARY STATUS REPORT—EVALUATION PHASE



VOCABULARY STATUS REPORT

FEEDBACK PAGE—NO RETURN

Page: 7 of 12

ENTRY NUMBER	descriptor and description of recommended action	New Term	Change	Purge	Originator	Date Received	VRG*		Date of Disposition		REVIEWER'S REMARKS (Please detail any objections; use back of form, if necessary.)	ELAPSED TIME
							Agree	Do Not Agree	Implemented **	Not Implemented		
1066	PREWRITING SN: All activities that precede the first draft of a written work -- includes planning, outlining, notetaking, oral discussion, use of visual aids, etc.	X			CS	3/81	12	7	5/81		Modified by CS per suggestions from JC/HE/AA (VRG)	2 mos
1067	WRITING EVALUATION SN: Objective or subjective procedures for describing, appraising, or judging writing skills (Note: Do not confuse with LITERARY CRITICISM)	X			CS	3/81	17	3	5/81		Term OK, but changed words "written language" in SN to "writing skills" (per JC/RC) & added JC's "do not confuse..." note -- reciprocal note will be added to LITERARY CRITICISM -- proposed UF Writing Assessment not approved (VRG)	2 mos
1068	SELECTIVE DISSEMINATION OF INFORMATION SN: An information service, usually computer-based, that periodically distributes copies or notices of current documents to its users -- such distribution is often (CONT'D UNDER "REVIEWER'S REMARKS" COLUMN)	X			IR	3/81	19	2	5/81		based on the users' own statements (sometimes called "interest profiles") of what they need. UF: Current Awareness Services; SDI - * - * - * - * - * - SN broadened by AA per suggestion by CE (VRG)	2 mos

*Return 2 Copies By: To: ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

** Term may be used for indexing as of this date.

Reviewer/Organization

FIGURE VIII-1-8: VOCABULARY STATUS REPORT—FEEDBACK PHASE

10. Facility Lexicography is responsible for implementing all approved recommendations to the *Thesaurus* file, and making any necessary postings updates to the index (inverted) files to ensure their compatibility with the updated *Thesaurus*. Additionally, the lexicographic staff prepares a "final report" of each month's *Thesaurus* activities entitled *Thesaurus Changes and Statistical Data* (not shown in the flow of the Vocabulary Development Program, Figure VIII-1-6). This report contains three standard attachments, as follows:

- Attachment 1 provides a listing of the major *Thesaurus* transactions in the monthly file update. It serves as a supplement to the *Thesaurus Working Copy*, and is used by the CIJE/*Thesaurus* Contractor to update the New Thesaurus Terms sections of RIE and CIJE. (New Thesaurus Terms serves as a supplement to users of the commercial, published *Thesaurus*.)
- Attachment 2 gives total *Thesaurus* input and disposition statistics for the month.
- Attachment 3 gives the cumulative total terms in the *Thesaurus* file as of the current update.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 8: VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 2) — IDENTIFIERS

April 1981

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

**SECTION VIII:
VOCABULARY DEVELOPMENT AND MAINTENANCE
(PART 2)—IDENTIFIERS**

VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 2)—IDENTIFIERS

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VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 2) — IDENTIFIERS

SUMMARY OF SIGNIFICANT RULES

1. Identifiers are semi-controlled retrieval terms intended to add a depth to indexing that is not always possible with Descriptors alone. An Identifier is usually the name of a specific entity, e.g., project, person, place, organization, test, group, item of equipment, piece of legislation. An Identifier may also be a new concept, under consideration for Descriptor status and awaiting approval for admission to the ERIC *Thesaurus*.
2. The *Identifier Authority List* (IAL) should be consulted before index terms are added to the Identifier fields of RIE and CIJE. The IAL serves as a companion volume or supplement to the ERIC *Thesaurus*.
3. A term may not be an Identifier if it is an existing Descriptor, a synonym (UF) referenced to a Descriptor, a Dead/Invalid Descriptor, or a variant form of a Descriptor.
4. Because acronyms have a high potential of being homographs, their use alone is to be avoided.
5. Identifiers may not exceed 50 characters in length, including spaces. Terms naturally exceeding 50 characters must be shortened according to prescribed procedures (i.e., by removal of articles, conjunctions, prepositions, etc., or by abbreviating common words). However, the first word of an Identifier may never be abbreviated.
6. Spelling and word form conventions used for Descriptors should also be used for Identifiers. Spelling of proper names should not be changed. American (United States) English standard usage is followed for common nouns.
7. Non-English terms not found in standard unabridged English dictionaries or in specialized subject dictionaries should be translated (unless they are part of a personal or proper name, such as that of an organization, where translation depends on the way the name usually appears in English print).
8. Numbers exceeding one word in length should normally be written as Arabic numerals (except when the spelled out version is the official or formal name). Roman numerals are permitted only when used as the numbers of legislative "titles."
9. Identifiers do not have the complex hierarchical structure of Descriptors, but they may, as needed, have UF's (providing cross-references) or Scope Notes (providing explanatory material).
10. Identifiers that are homographs must be differentiated either by a parenthetical qualifier or by a spelling variation. They cannot be differentiated by spacing or case.

11. Identifiers may not contain ANY punctuation other than left and right parentheses.
12. Identifiers are grouped by specific characteristics or subject matter into twenty (20) categories, i.e., personal names, organizations, geographic locations, etc. In addition to the general rules contained in this summary, each category has its own specific conventions or guidelines that should be followed in creating Identifiers.

VIII. VOCABULARY DEVELOPMENT AND MAINTENANCE (PART 2)—IDENTIFIERS

A. Introduction

1. Identifiers—Definition and Function

Identifiers are semi-controlled retrieval terms, intended to add a depth to indexing that is not always possible with Descriptors alone. An Identifier is usually the name of a specific entity, e.g., project, piece of legislation, person, place, organization, test, group, item of equipment. There is a nearly infinite number of specific entities, and it would not be appropriate to burden a thesaurus with such multiplicity. Also, Identifiers, being so specific, are often transitory or represented in the literature infrequently, further arguing for separate treatment.

An Identifier may also be a new concept, under consideration for Descriptor status once its scope, definition, and "staying power" have been established. Candidate Descriptors, awaiting approval for admission to the *Thesaurus of ERIC Descriptors*, should always be indexed as Identifiers.

Identifiers are neither structured nor formally defined (as Descriptors are); however, they must be somewhat controlled in order to eliminate the proliferation of variant forms of the same concept. Such control is achieved by imposing format standards, particularly for such entities as geographic locations, organization names, and specific ethnic and occupational groups. It is also helpful to group Identifiers into meaningful categories for the purpose of bringing like terms together. Figure VIII-2-1 depicts the current set of Identifier categories, and the number of Identifiers, as well as the percentage of all Identifiers, in each category as of March 1980. Categories are useful in subdividing an Identifier file for particular indexing and searching applications. Editors find categories helpful to quickly determine available options among particular types of terms. Lexicographers use them for spotting omissions and commissions that are less apparent in a total Identifier listing such as the *Identifier Authority List*.

2. Identifier Authority List (IAL)

The *Identifier Authority List* or IAL is a total alphabetical list of the preferred Identifier forms, developed according to standards, that can be used to achieve consistency in indexing and searching alike. In printed form, it serves as a companion volume or supplement to the *ERIC Thesaurus*. Just as the *Thesaurus* controls Descriptor usage, the IAL provides control over Identifiers to the extent that variant forms of the same concept are eliminated.

First published in 1980, the IAL was the result of an Identifier editorial project that reviewed the Identifiers in the file from the beginning of ERIC in 1966 through April 1976. The project ultimately reduced the number of Identifiers on the

CATEGORY NUMBER	CATEGORY NAME	NUMBER OF IDENTIFIERS IN CATEGORY	PERCENT OF IDENTIFIER AUTHORITY FILE
02	CONFERENCES/MEETINGS	273	1.0
03	CURRICULUM AREAS	336	1.3
04	EQUIPMENT (INCLUDING COMPUTER PROGRAMS)	695	2.8
05	FACILITIES	197	.8
07	GEOGRAPHIC LOCATIONS	1,909	7.6
08	GROUPS (ETHNIC)	275	1.0
09	GROUPS (OCCUPATIONS)	514	2.4
10	GROUPS (OTHER)	67	.26
11	HEALTH-RELATED (INCLUDING PSYCHOLOGY)	779	3.1
12	HISTORICAL/SPECIAL EVENTS	86	.34
13	LANGUAGES/LINGUISTICS	864	3.4
14	LAWS/LEGISLATION	474	1.8
15	METHODS/THEORIES	1,989	7.9
16	MISCELLANEOUS	1,464	5.8
17	ORGANIZATIONS/INSTITUTIONS	6,127	24.4
18	PERSONAL NAMES	2,009	8.0
19	PROJECTS/PROGRAMS	2,025	8.0
20	SCIENCE & TECHNOLOGY	1,296	5.1
21	TESTS/TESTING	2,993	12.0
22	TITLES (LITERATURE AND THE ARTS)	717	2.9
		25,089	100.0%

FIGURE VIII-2-1: ERIC IDENTIFIER CATEGORIES (STATISTICS AS OF MARCH 1980)

file for that period from approximately 46,000 to 25,000. The cumulation of this large number of Identifiers over ERIC's first 10 years occurred as the system evolved from a manual, print-oriented data base to a system accessible via computer in a variety of different ways. As the number of entry points increased and the file expanded, it became necessary to reduce the number of ways single subjects could be accessed.

The approximately 25,000 edited Identifiers, known as "preferred terms," became the basis for the IAL as it now exists. The other 21,000 "non-preferred terms" were either variant Identifier forms transferred to one of the preferred forms, variants (or duplicates) of Descriptors and eventually transferred to the appropriate Descriptor, or unnecessary or ambiguous items that could simply be purged.

Since the creation of the IAL in mid-1980, additional Identifiers are being added to it as a result of the regular monthly input to the data base. Items are purged from the IAL as they are upgraded to Descriptor status and shifted to the ERIC *Thesaurus*.

The printed IAL should be consulted before index terms are added to the Identifier fields of RIE and CIJE. Working copies of the IAL are produced semi-annually for Clearinghouse use.

The computerized IAL is used as a validation file during the editing of all incoming ERIC resumes.

B. General Guidelines/Rules Applying to All Identifiers

1. Terms That May Not Be Identifiers

a. Descriptors

Once terms have been approved as valid descriptors, they may not be used as Identifiers (even if they were formerly on the IAL). The *Thesaurus* always takes precedence over the IAL.

b. Synonyms (UF's) of Descriptors

Terms in the *Thesaurus* that are cross-referenced to Descriptors may not be Identifiers. The *Thesaurus* leads the user from these terms to a particular valid Descriptor. To make them Identifiers would undercut this cross-reference and would be contrary to a lexicographic decision already made and recorded.

c. Dead/Invalid Descriptors

Terms that once were valid Descriptors but that have been deliberately removed from the *Thesaurus* as usable terms may not be Identifiers. The qualities of these terms that made them undesirable as Descriptors (e.g., ambiguity) also make them undesirable as Identifiers.

d. Variant Forms of Descriptors

Not all variant forms of Descriptors can be inserted into the *Thesaurus* as UF's. Terms that are merely variant ways of expressing a concept already represented by a Descriptor should not be made Identifiers. The appropriate Descriptor should always be substituted in such cases.

Examples are as follows:

DESCRIPTORS	VARIANT TERMINOLOGY FOR WHICH THE DESCRIPTOR CAN STAND (AND WHICH SHOULD NOT BECOME IDENTIFIERS)
Neonates	Newborns Neonatal Behavior Neonatal Characteristics Neonatal Research
Performance Contracts	Performance Contracting Student Learning Contracts Contract Teaching Contract Learning Grade Contracts

2. Acronyms

The use of acronyms as Identifiers is discouraged. By their nature, acronyms are prone to being homographs. In general, acronyms may be used only when they will not be confused with other words or acronyms. Figure VIII-2-2 illustrates the kinds of problems experienced with acronyms. Figure VIII-2-3 displays examples of some acronyms that have been approved for use as Identifiers.

ACRONYMS	DEFINITIONS
ICONS	An acronym for Interagency Conference on Nursing Statistics
Icons	A language term meaning pictorial representation
TACTICS	An acronym for Technical Assistance Consortium to Improve College Service
Tactics	As in tactics for handling labor relations, military situations, etc.
CASE	A computer program
Case	A linguistic term
CASE	An acronym for Council for Administration of Special Education
CASE	An acronym for Council for the Advancement and Support of Education
RIF	An acronym for Reading Is Fundamental
RIF	An acronym (and UF) for Reduction in Force
Rif	A language

FIGURE VIII-2-2: EXAMPLES OF PROBLEMS EXPERIENCED BY USING ACRONYMS AS IDENTIFIERS

Formerly, ERIC practiced double entry of both spelled out version and acronym. This practice should no longer be used. Similarly, Identifiers should not be created in the form of the spelled out version followed by the acronym in parentheses. The spelled out version should be used in lieu of the equivalent acronym. Should a document processor wish to associate an acronym with its spelled out version, the place to do so is in the abstract/annotation, as in the following example:

ABSTRACT:...Students involved in the project were clients of the Comprehensive Employment and Training Act (CETA) who had participated in the College Level Examination Program (CLEP)...

IDENTIFIERS: Comprehensive Employment and Training Act; College Level Examination Program

AAHPERD	American Alliance for Health, Physical Education, Recreation, and Dance
AFL CIO	American Federation of Labor and Congress of Industrial Organizations
AUDACIOUS	Automatic Direct Access to Information with the Online UDC (Universal Decimal Classification) System
AUSINET	Australian Information Network
BALLOTS	Bibliographic Automation of Large Libraries Using Time-Sharing
CINTERFOR	Centro Interamericano de Investigacion y Documentation sobre Formacion Profesional (Interamerican Research and Documentation Center on Vocational Training)
CDA	Child Development Associate
DIDACTA	European Media Conference
ERIC	Educational Resources Information Center
INSPEC	Information Services for the Physics and Engineering Communities
MEDLARS	Medical Literature Analysis and Retrieval System
OCLC	Ohio College Library Center
PLATO	Programmed Logic for Automated Teaching Operations
SEESAW	Computer Program
SUPERMARC	Data Format Standard
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USSR	Union of Soviet Socialist Republics
VAULT	Veterans Accelerated Urban Learning for Teaching

FIGURE VIII-2-3: EXAMPLES OF ACRONYMS APPROVED AS IDENTIFIERS

When a multiword Identifier exceeds 50 characters, it may be necessary to make use of abbreviations (or sometimes acronyms) to keep within the 50-character limit (see below, "Identifier Length").

3. Identifier Length

Identifiers may not exceed a maximum of 50 characters in length (including blanks). Terms naturally exceeding 50 characters must be shortened: (1) via the removal of conjunctions, articles, or prepositions, or, if that is insufficient, (2) via the abbreviation of common words (see Figure VIII-2-4).

The first word of an Identifier should not be abbreviated (except in the case of certain approved organization acronyms, e.g., "ERIC"). The common words may, of course, be abbreviated anywhere else they appear; however, in general, when an Identifier requires abbreviation it is better to abbreviate toward the end of the term rather than toward the beginning. Also, in general, the words in an Identifier that are of greatest significance for searching and retrieval should not be abbreviated. Two examples follow:

Original Term (62 characters)	American Association of Educational Administrators of Guidance
Abbreviated Identifier (49 characters)	American Assn Educational Administrators Guidance

"Association" is the best word to abbreviate. It is not the first word. It is in the table of common words. It is not one of the key words for retrieval (i.e., "Educational Administrators," "Guidance").

Original Term (69 characters)	Federation of Associations in the United States of America and Canada
Abbreviated Identifier (48 characters)	Federation of Associations in the USA and Canada <i>(Better than the following alternative)</i> Federation Associations United States Canada

Academy, Academic	Acad	Government	Govt
Administration, Administrators, Administrative	Admin	Guidance	Guid
Affiliated, Affiliation	Affil	Hospital(s)	Hosp
Agriculture, Agricultural	Agric	Industrial, Industry	Indust
American	Amer	Information	Info
Association(s)	Assn	Institute(s), Institution(s)	Inst
Associate(s)	Assoc	Instruction, Instructional	Instr
Audiovisual	AV	Interdisciplinary	Interdiscip
Behavioral, Behavior	Behav	International	Intl
Biological, Biology	Biol	Laboratory	Lab
Biomedical, Biomedicine	Biomed	Language(s)	Lang
Board(s)	Bd	Library	Lib
Bureau(s)	Bur	Literature	Lit
Business	Bus	Mathematics	Math
Center(s), Centre(s)	Ctr	Metropolitan	Metro
Chemistry	Chem	National	Natl
College(s)	Coll	Occupational, Occupations	Occup
Committee, Community	Comm	Program(s)	Prog
Communication(s)	Commun	Project(s)	Proj
Conference(s)	Conf	Psychology, Psychological	Psych
Convention(s)	Conv	Research	Res
Continuing	Cont	Research and Development	R and D
Cooperative, Cooperation	Coop	School(s)	Sch
Coordination, Coordinator	Coor	Science(s)	Sci
Corporation(s)	Corp	Service(s)	Serv
Curriculum	Curr	Session(s)	Sess
Department(s), Departmental	Dept	Special	Spec
Development, Developmental	Develop	Superintendent(s)	Supt
District(s)	Dist	Teaching, Teacher(s)	Teach
Division(s)	Div	Technical	Tech
Education, Educational	Educ	Technological, Technology	Techn
Evaluation	Eval	Television	TV
Faculty, Faculties	Fac	University	Univ
Facility, Facilities	Facil		
Federal	Fed		

FIGURE VIII-2-4: COMMON WORDS THAT MAY BE ABBREVIATED IN IDENTIFIERS WHEN TRUNCATING TO MAKE 50-CHARACTER LIMIT

"Federation" and "Associations" are the key words for retrieval and should not be abbreviated. The first alternative does the least overall violence to the original name.

4. Numbers

Numbers exceeding one word in length, whether they are a part of or the whole of the concept being indexed, should normally be written as Arabic numerals and not spelled out, unless the spelled out version is the official or formal version.

Examples of Identifiers containing Arabic numbers are:

1984 (Title)

NOTE: The qualifier "(Title)" is placed after the names of literary/artistic works that might otherwise not be recognized as such.

1 8 1 8 Plan
4 1 4 Calendar
45 15 Plan
4 H Clubs
Congress 95th
Copyright Law 1976

Examples of Identifiers using the spelled out version are:

Fourteenth Amendment
Nineteenth Century
One Act Plays
One Nation Indivisible
One Word Sentence Completion

Three Little Pigs
Twentieth Century
Two Stage Testing
Two Way Communication

Roman numerals are permitted only when used as the numbers of "Titles" (i.e., sections) in legislation.

Elementary Secondary Education Act Title III
Social Security Act Title XX

The official or formal version of a numerical concept is always chosen when it can be determined, even if it should vary from the above conventions.

Calendar dates (years, months, days) should always be expressed as numerals, except in those special instances where a date (spelled out) is the title of a literary/artistic work, e.g., "Twelfth of June (Title)."

5. Spelling and Word Form

In general, the same spelling and word form conventions used for Descriptors should also be used for Identifiers. This allows concept-type Identifiers, when appropriate, to "graduate" to Descriptor status with a minimum of alteration. It is also beneficial to searchers if they can rely on ERIC to be consistent in the construction of its index terms.

The spelling of proper names should not be changed from that of the official or formal version, e.g.:

- Centre for Continuing Education (Australia)
(Do not change "Centre" to "Center.")
- Organisation for Economic Cooperation [and]* Development
(Do not change "Organisation" to "Organization.")
- Computer Programmer Aptitude Battery
(Do not change "Programmer" to "Programer.")

However, American (i.e., United States) English standard usage is followed when common nouns or generics are involved, e.g.:

- Programed Student Achievement
- Testing Centers
- Student Health Organizations

The *Thesaurus'* Rotated Display is an excellent source to consult in determining the proper spelling and/or format for similar words, e.g.:

**"and" deleted to fit name within 50-character limit

PREFERRED WORD FORM	NON-PREFERRED WORD FORM	GUIDANCE FROM 'THESAURUS' ROTATED DISPLAY
• Parent Behavior • Parent Rights	Parental Behavior Parental Rights	Parent Associations Parental Background <u>USE</u> Parent Background
• Theological Libraries	Libraries (Theological)	Public Libraries Regional Libraries School Libraries (i.e., No Inverted Entries)
• Programed Student Achievement	Programmed Student Achievement	Programed Instruction Programed Tutoring (i.e., No Double M's)
• Retroaction (Psychology)	Retroaction (Psychological)	Recall (Psychological) <u>USE</u> Recall (Psychology)

6. Non-English Terms

The English language has incorporated much terminology from other languages for which there is no exact or simple translation into English, e.g., Machismo, Deja Vu, Roman a Clef. Such terms can regularly be found in English language dictionaries and can therefore be considered part of the normal resources of the language. They need not be translated when used as Identifiers.

In addition, a great deal of Latin terminology can be considered a normal part of English usage, particularly as employed in the fields of law and medicine, e.g., Corpus Delicti, Spina Bifida. Such terms likewise need not be translated.

The propensity of English to "borrow" in this way makes it difficult to formulate a single general rule that applies to all non-English terminology.

If a non-English term or phrase can be found in standard unabridged English dictionaries, or in the specialized dictionaries of fields such as law and medicine, then the term may be used as is, without translation. If a term cannot be identified in such sources, then an attempt should be made to translate it into English. Translation should be based closely on the original and should not be excessively creative or "free."

The objective is to translate in a repeatable way so that if another indexer at another time is faced with the same term the same translation will result. (Translators should keep in mind that the ERIC data base does not provide for diacritical marks of any kind.)

The use of foreign proper names as Identifiers depends on the way they normally appear in English print. In general, personal names are recorded as close to their appearance in their original language as possible. A good reference to use for personal name form problems is the *Anglo-American Cataloging Rules*. Organizational names present a more complex problem. Names from languages with non-Roman alphabets (e.g., Cyrillic) are always translated (not just transliterated) into their English equivalent. Names from other languages should follow the practice of the standard international reference work in the field of institutions of education, *The World of Learning*.

Examples of some non-English terms and how they would be handled as Identifiers are displayed in Figure VIII-2-5.

Two general references of value are:

- (1) Section 25: "Foreign Languages" of the *GPO Style Manual*, and
- (2) Section 9: "Foreign Languages in Type" of the *Chicago Manual of Style*.

Both contain detailed material on typography, diacritics, capitalization, punctuation, special characters, abbreviation, word division, etc., of all the common foreign languages.

7. Structure (i.e., Cross-References, Scope Notes)

Identifiers do not have the complex cross-reference structure accorded Descriptors, i.e., NT's, BT's, RT's. However, beginning in 1981 two elements of structure were added to the *Identifier Authority List* (IAL): (1) Used For cross-references, and (2) Scope Notes. Either or both of these elements may now be added on an "as needed" basis to any given Identifier.

a. "Used For" Cross-References

Used For cross-references should be used either to indicate preferred name forms or to lead from an abbreviation/acronym to the correct full form, e.g.:

Empire State College
USE State University of New York Empire State Coll

CETA
USE Comprehensive Employment and Training Act

<u>TERM</u>	<u>NOTE</u>
Avant Garde	"Borrowed" French term.
Blitzkrieg	"Borrowed" German term.
*Carrascoledas (Television Series)	Television Series.
*De Bello Civilis	Classical Latin text.
*Diaz del Castillo (Bernal)	Person.
*Dia de los Muertos	Hispanic holiday.
*Globus Hystericus	Medical term (Latin).
*Habeas Corpus	Legal term (Latin).
*In Loco Parentis	Legal term (Latin).
Laissez Faire	"Borrowed" French term.
*La Raza Unida Party	Political party. Name commonly used untranslated in both Hispanic and English contexts.
*Machismo	"Borrowed" Spanish term.
*Moscow State University (USSR)	Foreign organization. Translated from Russian (Cyrillic).
Realites	French Magazine.
*Spina Bifida	Medical term (Latin).
Tae Kwon Do	Martial Art. Transliterated from Japanese.
*Universidad de Educacion a Distancia (Spain)	Foreign organization. Name form retained as is. Country added in parentheses.
*War and Peace	Name of novel. Translated from Russian.
Weltschmerz	German term meaning literally "world weariness" but borrowed by English.
* Existing Identifier	

FIGURE VIII-2-5: EXAMPLES OF NON-ENGLISH TERMS AND HOW THEY WOULD BE HANDLED AS IDENTIFIERS

Cross-references will not normally be made from nonpreferred direct forms (e.g., San Juan Puerto Rico) to preferred inverted forms (e.g., Puerto Rico (San Juan)).

Used For references are limited in length to 50 characters (including blanks).

b. Scope Notes

The Scope Note field provides a home for a wide variety of explanatory material bearing on indexing distinctions and clarifications, e.g.,

Ilocano
SN Indonesian Language

AAHPERD
SN Acronym for the American Alliance for Health,
Physical Education, Recreation, and Dance

Russia
SN Before 1917 an East European country, and after
that a republic of the USSR—Use "USSR (Russia)"
for documents dealing solely with that republic—
do not confuse with "USSR"

In general, Identifier Scope Notes should not be used simply to define a term, as is done in the *Thesaurus*. It is not ERIC's intention to provide definitions for the many thousands of relatively obscure Identifiers.

8. Capitalization

Identifiers are written with initial capital letters for all words except prepositions, articles, and conjunctions. Exceptions occur in those infrequent cases where the preposition/article/conjunction is the first word of the Identifier, or where it is used in a literary/artistic title.

NORMAL USAGE: Department of Education
LEADING PREPOSITION: Off Campus Activities
TITLE: Graduate (The)

Further examples of usual and exceptional upper/lower case situations for both Descriptors and Identifiers can be found in Figure VIII-2-6. (This figure also appears in Section 7: "Indexing" in the discussion entitled "Capitalization of Index Terms.")

9. Word Order

Each Identifier category specifies its own word order conventions.
If no guidelines or examples can be found pertinent to a proposed new Identifier, natural word order should be followed.

		DESCRIPTORS		IDENTIFIERS	
ARTICLES/ CONJUNCTIONS/ PREPOSITIONS		USUAL USAGE (LC) (EXAMPLE)	EXCEPTION (UC) (EXAMPLE)	USUAL USAGE (LC) (EXAMPLE)	EXCEPTION (UC) (EXAMPLE)
A		Postsecondary Education as a Field of Study	None	To Kill a Mockingbird	A Better Chance Inc
AN		None	None	To an Athlete Dying Young	...
AND		Food and Drug Inspectors	None	Crime and Punishment	And Searching Mind*
AS		Postsecondary Education as a Field of Study	None	Maryland Self Concept as a Learner Scale	As You Like It
BY		Management by Objectives	None	Baghdad by the Bay*	By Love Possessed*
FOR		English for Special Purposes	None	Fund for Adult Education	For Whom the Bell Tolls*
IN		Reduction in Force	In-State Students	Catcher in the Rye	In Cold Blood
OF		Leaves of Absence	None	Epic of Gilgamesh	Of This Time of That Place
ON		State Committees on Education (UF)	On Campus Students On the Job Training	Soul on Ice	On the Origin of Species
PER		Expenditure per Student	None	...	Per Capita*
THE		State of the Art Reviews	None	College of the Sea (England)	Graduate (The)
TO		Adjustment (to Environment)	None	Pathways to Identity Project	To Kill a Mockingbird

LC = Lower case; UC = Upper case

*Not currently an identifier

FIGURE VIII-2-6: CAPITALIZATION OF ARTICLES/CONJUNCTIONS/PREPOSITIONS
IN DESCRIPTORS AND IDENTIFIERS

10. Punctuation

With the exception of parentheses, no punctuation may be used in Identifiers. (This restriction refers solely to punctuation within the Identifier itself and does not refer to the semicolon used as a subfield delimiter between multiple Identifiers, or to the asterisk used to tag major Identifiers).

Terms normally having punctuation, e.g., commas, hyphens, apostrophes, ampersands, periods, exclamation marks, quotation marks, colons, slashes, question marks, etc., must be corrected to acceptable forms without punctuation. Examples of such conversions are shown below:

POTENTIAL TERM WITH PUNCTUATION	FINAL ACCEPTABLE IDENTIFIER WITHOUT PUNCTUATION
James E. Allen, Jr.	Allen (James E Jr)
T.S. Eliot	Eliot (T S)
Eugene O'Neill	O Neill (Eugene)
Bloom's Taxonomy	Blooms Taxonomy
45-15 Plan	45 15 Plan
St. Paul Public Schools MN	Saint Paul Public Schools MN
Dick & Jane Readers	Dick and Jane Readers
If You Live in a City, Where Do You Live?	If You Live in a City Where Do You Live
They Shoot Horses, Don't They? Oh, God!	They Shoot Horses Dont They Oh God (Title)
"I Heard a Fly Buzz When I Died"	I Heard a Fly Buzz When I Died
Yorkshireman: A Case Study	Yorkshireman A Case Study
Field Dependence/Independence	Field Dependence Independence

11. Homographs

Homographs (terms with different meanings that have the same spelling) must be differentiated by creating some difference in the spelling or by adding a parenthetical qualifier, e.g.:

TERM	MEANING	DIFFERENTIATED TERMS
PLATO	Computer-assisted education system	PLATO
Plato	Greek philosopher	Plato of Athens
Jupiter	Roman god	Jupiter
Jupiter	Planet	Jupiter (Planet)
Jupiter	Ballistic missile	Jupiter Missile

Homographs cannot be differentiated by creating differences in capitalization and spacing. The ERIC computer system, in comparing index terms during the automatic validation process, converts all terms to upper case and removes blanks and special characters (except the left parenthesis). This procedure means that terms varying only in capitalization and/or the appearance of blank spaces are interpreted by the computer as the same term.

TERMS VARYING ONLY IN CAPITALIZATION OR BLANK SPACES	AS TRANSLATED BY COMPUTER FOR COMPARISON PURPOSES
Project Out Reach	PROJECTOUTREACH
Project OUTREACH	"
Project Outreach	"

If the above variant forms were actually used by ERIC indexers and were appearing together in an index, all the variants would validate, but the printed/displayed index entry would be determined by the particular variant that appeared first in the sequence of accessions involved, i.e., that was read first by the computer.

It is clearly undesirable for terms varying only by capitalization and spacing to be placed in the ERIC file. In addition to creating potentially confusing index entries, such terms can adversely affect retrieval efforts. For example, to retrieve all the accessions using the three "Projectoutreach" variant forms cited above, a searcher would have to use two distinct search strategies:

Outreach/ID
Out (w) Reach/ID

12. Special Indexing Agreements and Recommendations

From time to time ERIC makes formal arrangements with specific organizations or programs to index the document output of that organization in a special way in order to facilitate retrieval. Usually these are organizations and projects funded by some element of the Department of Education, e.g., National Diffusion Network (NDN); National Assessment of Educational Progress (NAEP).

In addition, ERIC sometimes independently makes recommendations to the Clearinghouses concerning the indexing of certain classes of documents, e.g., Information Analysis Products.

All current agreements and recommendations made to date are summarized in Figure VIII-2-7.

ORGANIZATION NAME OR TYPE OF DOCUMENT	AGREEMENT OR RECOMMENDATION
Information Analysis Products (IAP's)	<ul style="list-style-type: none"> • All ERIC Clearinghouse Information Analysis Products were formerly indexed by the major Identifier "Information Analysis Products." With the advent of the Publication Type data element (and specifically code 071 for IAP's), this indexing convention became obsolete and should no longer be observed.
National Assessment of Educational Progress (NAEP)	<ul style="list-style-type: none"> • The NAEP is currently operated by the Educational Testing Service (ETS). All NAEP documents should be indexed: (1) by "National Assessment of Educational Progress," and (2) by one or more of the special Identifiers listed in Figure VIII-2-8.
National Diffusion Network (NDN)	<ul style="list-style-type: none"> • Documents about NDN should be indexed by the (preferably major) Identifier "National Diffusion Network." • Documents generated by programs or projects under NDN sponsorship should be indexed by the minor Identifier "National Diffusion Network Programs." • NDN projects with specific names should be indexed by these names as (preferably major) Identifiers, e.g., "Project Adventure." • Documents describing JDRP*-validated programs should be indexed by the minor Descriptor "Validated Programs." (Documents dealing with the actual subject matter of validation should be indexed with the Descriptor "Program Validation.")
Research and Development Utilization (RDU) Program	<ul style="list-style-type: none"> • Documents resulting from the RDU program should be indexed by the major Identifier "Research and Development Utilization Program." • Use of the Descriptor "Linking Agents" to index RDU materials is recommended as often appropriate. • The Sponsor for all RDU materials should be cited as the National Institute of Education (with whatever subdivision and Departmental label is appropriate at the time).

*JDRP - Joint Dissemination Review Panel

FIGURE VIII-2-7: SPECIAL INDEXING ARRANGEMENTS

SPECIFIC NAEP ASSESSMENTS

REGULAR ASSESSMENTS

First Art Assessment (1975)
Second Art Assessment (1979)

First Career Occup Develop Assess (1974)
Second Career Occup Develop Assess

First Citizenship Assessment (1970)
Second Citizenship Social Studies Assess (1976)
Third Citizenship Social Studies Assess (1982)

First Literature Assessment (1971)

First Mathematics Assessment (1973)
Second Mathematics Assessment (1978)
Third Mathematics Assessment (1982)

First Music Assessment (1972)
Second Music Assessment (1979)

First Reading Assessment (1971)
Second Reading Assessment (1975)
Second Literature Third Reading Assessment (1980)

First Science Assessment (1970)
Second Science Assessment (1973)
Third Science Assessment (1977)

First Social Studies Assessment (1972)

First Writing Assessment (1970)
Second Writing Assessment (1974)
Third Writing Assessment (1979)

MINI ASSESSMENTS

Adult Reading Mini Assessment (1977)
Adult Science Mini Assessment (1977)
Basic Life Skills Mini Assessment (1977)
Career Occup Develop Mini Assessment (1980)
Consumer Skills Mini Assessment (1978)
Energy Knowledge Attitudes Mini Assessment (1977)
Functional Literacy Mini Assessment (1975)
Health Awareness Mini Assessment (1977)
Mathematics Mini Assessment (1976)

FIGURE VIII-2-8: SPECIAL IDENTIFIERS TO BE ASSIGNED TO NAEP DOCUMENTS INPUT TO ERIC SYSTEM (ASSIGNMENT TO BE INDICATED BY NAEP ON ORIGINAL DOCUMENTS)

C. Guidelines Applying to Identifiers in Specific Categories

Every Identifier is assigned to one (and only one) of the twenty broad categories listed in Figure VIII-2-1. The category number is assigned to the Identifier at the time it is entered into the *Identifier Authority List (IAL)*. Identifier categories serve the same purpose for Identifiers that Descriptor groups do for Descriptors, i.e., browsing and easy scanning of large numbers of terms that may be of interest within a given area.

Individual listings of Identifiers by category are published periodically, as needed. Certain original categories (01 for "Acronyms" and 06 for "Foreign Words and Phrases") have been discontinued; therefore, the only active category numbers are 02-05, 07-22.

While the general rules discussed previously apply to all Identifiers, the guidelines that follow are grouped by category and apply only to terms in that specific category.

1. Conferences/Meetings (Category 02)

This category brings together the formal names of gatherings held either regularly or on a one-time basis. It is not to be confused with organizational names containing the word "Institute" or "Conference."

Identifiers for conference/meeting names are appropriate only when the meeting is the subject of the document. They are not appropriate as simply a way to tag all of the papers or proceedings from a particular meeting. The Descriptive Note field is the proper field to identify the meeting at which a paper was given. A meeting may be the subject of a document when, for example, the document is analyzing the results of a meeting, the need for a meeting, the ramifications of resolutions passed, the impact of a meeting, or the design of a meeting.

Natural word order is followed, without artificial inversions, e.g.:

Brookings Conference on Vocational Education
National Computer Conference
White House Conference on Aging

Since conference names are often long and may exceed the 50-character limit, abbreviation is frequently required. Using an acronym for the organization involved is an acceptable technique, e.g.:

Conference: National Council of Teachers of English Seminar on Research in English Education (80 characters)

Use: NCTE Seminar on Research in English Education (45 characters)

Conferences which occur regularly under the same name, with only the date differing, should be entered under the standard name without date. Material for specific years can be retrieved by coordinating Identifier with Publication Date.

Since the geographic location of a conference is usually incidental and inconsequential, conference name Identifiers should almost never use forms such as "New York Conference," "Conference at Idaho Falls," etc.

Names should always be as complete as possible, especially as to the topic of the gathering, e.g.:

Use: Rutgers Conference on School Lunch Programs
Do Not Use: Rutgers Conference

2. Curriculum Areas (Category 03)

This category contains names of courses, listings in catalogs, teaching sequences, specific curricula, and other curriculum-related terms, e.g.:

Biological Sciences Curriculum Study
Business Law
Chicano Studies
Man A Course of Study

Curriculum series are frequently the end result of a project or program and may be referred to by the project/program name as well as by the curriculum name. In such situations, one name should be selected as the preferred form, e.g.:

Preferred Identifier: Bereiter Engelmann Curriculum
Non-Preferred Synonyms: Bereiter Engelmann Method
Bereiter Engelmann Preschool Program
Bereiter Engelmann Program
Bereiter Engelmann Language Training Program

3. Equipment (Category 04)

This category contains the names of specific hardware, computer software, programming languages, materials, classroom aids/tools, etc. Examples are:

Abacuses	Honeywell Computers
Asbestos	Lockers
BASIC Programming Language	PLATO II
Binoculars	Wang 700 Programming Calculator

Kinds of equipment should be entered in the plural form, e.g., "Thermostats."

Specific items of equipment should be entered in the singular form; however, very specific model numbers should be avoided in favor of broader model designators, e.g.:

Preferred: IBM System 360 370

Non-Preferred: IBM System 360 Model 40
IBM System 360 Model 65

Programming languages should not be entered under the acronym alone, but should have the phrase "Programming Language" appended, e.g.:

BASIC Programming Language
LISP Programming Language
PL 1 Programming Language

4. Facilities (Category 05)

This category includes types of physical facilities or organizations. It excludes the names of specific organizations. Examples are:

Boards of Cooperative Educational Services
Chambers of Commerce
Infant Schools (United Kingdom)
Montessori Schools
Primary Schools (United Kingdom)
Stadiums
Textile Industry

All facilities names should be constructed in the plural form (as above). Concepts from a non-U.S. context which might be misconstrued should have an appropriate qualifier added, e.g.:

Infant Schools (United Kingdom)

5. Geographic Locations (Category 07)

This category contains the names of continents, countries, provinces, states, territories, regions, counties, cities, parks, and all types of physical formations (e.g., rivers, mountains, deserts, valleys, deltas, islands, peninsulas, etc.). Examples are contained in Figure VIII-2-9.

a. Format

Names of the fifty (50) U.S. states and the twelve (12) Canadian provinces/territories are entered directly. Names of communities, cities, and counties in the U.S. and Canada are not entered directly; instead, these smaller political subdivisions are entered as parenthetical qualifiers to the name of the particular state or province in which each resides.

Africa (East)	Missouri (Saint Louis)
Alabama	Mount Whitney
Alberta (Calgary)	New York (Harlem)
Antarctica	New York (Manhattan)
Appalachia	New York (New York)
Asia (Southeast)	New York (Niagara Falls)
Atlantis	Niagara Falls
Australia (Melbourne)	Nile River
British Commonwealth	Ontario (Ottawa)
California (Los Angeles)	Pacific Ocean
District of Columbia	Pacific Trust Territory (Marshall Islands)
Easter Island	Quebec (Quebec)
England (London)	Sahara Desert
Europe	Scandinavia
Everglades	Siberia
Florida (Hollywood)	South America
Ganges River	South Korea (Seoul)
Germany	Sweden (Stockholm)
Gondwanaland	Texas (Paris)
Great Plains	Timor
Greenland	United States (South)
Guana (Agana)	USSR (Tadzhikistan)
Hong Kong	Wales
Italy (Sicily)	Washington (Seattle)
Lake Michigan	West Germany
Maryland (Montgomery County)	Wisconsin (Eau Claire County)
Massachusetts (Cambridge)	Yakima Valley
Massachusetts (Springfield)	Yosemite National Park
Mississippi Delta	

FIGURE VIII-2-9: EXAMPLES OF HOW GEOGRAPHIC LOCATIONS ARE ENTERED

All Identifiers for countries other than the U.S. and Canada are entered with the name of a country followed by geographic subdivisions in parentheses, as appropriate. These procedures are followed in order to provide easy access to both generic and specific geographic levels (e.g., all Alabama localities will appear under the state name "Alabama," as for example "Alabama (Jefferson County)," "Alabama (Mobile)," etc.).

For purposes of this guideline, the "District of Columbia" and the U.S. Territories (i.e., "American Samoa," "Canal Zone," "Guam," "Pacific Trust Territory," "Puerto Rico," and "Virgin Islands") are considered on the same level as states. Also, divisions of the United Kingdom (i.e., "England," "Northern Ireland," "Scotland," and "Wales") are considered on the same level as countries. "Preferred" country names are included in the relatively complete list that immediately follows this discussion.

The names "United States," "Canada," and "United Kingdom" are normally used without qualifiers. However, these and all other place names may be qualified by common directional notations (e.g., "west," "southeast," "north central," "midwest"), which would be ambiguous if left standing alone. Typical entries of this type would be: "Canada (Northwest)," "Europe (East)," "Mexico (North Central)." Official names such as "North Carolina" and "Northwest Territories," and meaningful concepts such as "Middle East," are, of course, not considered directional notations.

Excluding the country Australia, continents may only be subdivided by directional notations or by large nonpolitical areas, e.g., "Africa (Sub Sahara)," "Africa (Tropical)," "Asia (Central)," "Asia (West)," "Europe (East Central)."

Names of overseas territories and natural geographic features and regions are entered directly and not as qualifiers to a larger entity, e.g.,

PREFERRED FORM	DO NOT USE
Easter Island Everglades Siberia	Chile (Easter Island) Florida (Everglades) USSR (Siberia)

Existence of a geographic location and its proper spelling should be verified in standard unabridged geographic dictionaries or gazetteers, e.g., *Webster's New Geographical Dictionary*, *Lippincott's Gazetteer*.

b. Subject versus Geographic Source

Do not confuse subject matter with geographic source. Geographic Identifiers are intended to reflect the subject matter of a document, i.e., the area studied, the area from which the data were gathered, etc., and are not intended to reflect the location of an institution doing the work, the location of an institution to which an author is affiliated, or the location of a publisher.

RIE carries a separate field to specifically identify the "Geographic Source" of a document. Although CIJE records do not carry this same field, the use of Identifiers to indicate geographic source should be strictly avoided as such a practice is misleading and detrimental to subject retrieval.

c. Homographs

Care should be taken in interpreting geographic locations cited in the text of documents. For example, twenty-four (24) states have a "Jefferson County"; eighteen (18) states have a "Springfield" town/city/village. Make certain that the name being used is correctly identified as to state, province, etc., and that it is not confused with a similar name from another location.

d. Indexing Practices

Be precise and specific in assigning geographic Identifiers. For example, do not use "Great Britain" unless the subject is truly the United Kingdom excluding Northern Ireland. "Russia" should be used only for the country name prior to 1917 and should not be confused with the current name "USSR." The current Soviet republic of Russia should be indexed "USSR (Russia)."

Do not confuse institutions and geographic Identifiers. For example, if the subject of a document is the policies of the Chicago Public Schools, assign the organizational Identifier "Chicago Public Schools IL" and not the geographic Identifier "Illinois (Chicago)." If the document perhaps also includes the subject of the impact of these policies on the citizens of Chicago, then the Identifier "Illinois (Chicago)" would also be appropriate.

Do not automatically "index up" to the broad levels "United States," "Canada," and "United Kingdom." A document should be indexed by more than one level of geographic Identifier only if it genuinely deals with dual or multiple levels.

e. Preferred Country Names

The three lists that follow display:

- (1) the provinces and territories of Canada;
- (2) the divisions ("countries") of the United Kingdom;
- (3) preferred name forms for most of the world's existing countries.

The third list contains a small number of cross references. "Use" references have been made from some common but nevertheless non-preferred forms to the preferred forms, e.g., "Britain, Use Great Britain." The reciprocal of a Use reference is a "Used For" (UF) reference. "See" references have been made from older name forms to current name forms. These older names, which are sometimes appropriate for the indexing of older or historical documents, are preceded by an asterisk (*). The reciprocal of the See reference is a "Seen From" (SF) reference.

List 1: Canadian Provinces and Territories

Alberta	Nova Scotia
British Columbia	Ontario
Manitoba	Prince Edward Island
New Brunswick	Quebec
Newfoundland	Saskatchewan
Northwest Territories	Yukon Territory

List 2: United Kingdom Divisions ("Countries")

England	Scotland
Northern Ireland	Wales

List 3: Preferred Country Names

(* = older name form)

Afghanistan	Benin
Albania	SF Dahomey
Algeria	Bermuda
Andorra	Bhutan
Angola	Bolivia
Argentina	Bophuthatswana
Australia	Botswana
Austria	Brazil
Bahamas	Britain
Bahrain	USE Great Britain
Bangladesh	*British Guiana
SF East Pakistan	SEE Guyana
Barbados	*British Honduras
Belau	SEE Belize
SF Palau Islands	Brunei
Belgium	Bulgaria
Belize	Burma
SF British Honduras	Burundi

(Continued)

*Cambodia	Finland
SEE Kampuchea	*Formosa
Cameroon	SEE Taiwan
Canada	France
NOTE When appropriate, use province (see List 1, above)	*French Guiana
Cape Verde	SEE Guiana
Central African Republic	French Polynesia
*Ceylon	Gabon
SEE Sri Lanka	Cambodia
Chad	German Democratic Republic
Chile	USE East Germany
China	German Federal Republic
NOTE Do not confuse with Taiwan	USE West Germany
UF Mainland China; Peoples Republic of China	Ghana
Ciskei	*Gilbert Islands
Colombia	SEE Kiribati
Comoros	Great Britain
Congo	NOTE When appropriate, use England, Scotland, or Wales
Costa Rica	UF Britain
Cuba	Greece
Cyprus	Grenada
Czechoslovakia	Guadeloupe
*Dahomey	Guatemala
SEE Benin	Guiana
Democratic Yemen	SF French Guiana
UF Peoples Democratic Republic of Yemen; Yemen (Democratic); Southern Yemen	Guinea
Denmark	Guinea Bissau
Djibouti	Guyana
Dominica	SF British Guiana
Dominican Republic	Haiti
East Germany	*Holland
UF German Democratic Republic	SEE Netherlands
*East Pakistan	Honduras
SEE Bangladesh	Hong Kong
Ecuador	Hungary
Egypt	Iceland
El Salvador	India
*Ellice Islands	Indonesia
SEE Tuvalu	Iran
Equatorial Guinea	Iraq
Ethiopia	Ireland
Federal Republic of	Israel
Germany	Italy
USE West Germany	Ivory Coast
Fiji	Jamaica
	Japan
	Jordan
	Kampuchea
	SF Cambodia; Khmer Republic
	Kenya
	*Khmer Republic
	SEE Kampuchea

(Continued)

Kiribati	Pakistan
SF Gilbert Islands	SF West Pakistan
*Korea	*Palau Islands
SEE North Korea; South Korea	SEE Belau
Kuwait	Panama
Laos	Papua New Guinea
Lebanon	Paraguay
Lesotho	Peoples Democratic
Liberia	Republic of Yemen
Libya	USE Democratic Yemen
Liechtenstein	Peoples Republic of China
Luxembourg	USE China
*Madagascar	Peru
SEE Malagasy Republic	Philippines
Mainland China	Poland
USE China	Portugal
Malagasy Republic	Qatar
SF Madagascar	Reunion
Malawi	*Rhodesia
Malaysia	SEE Zimbabwe
Maldives	Rumania
Mali	*Russia
Malta	SEE USSR
Martinique	Rwanda
Mauritania	San Marino
Mauritius	Sao Tome e Principe
Mexico	Saudi Arabia
Monaco	Senegal
Mongolia	Seychelles
Morocco	Sierra Leone
Mozambique	Singapore
Namibia	Solomon Islands
UF South West Africa	Somalia
Nationalist China	South Africa
USE Taiwan	South Korea
Nauru	SF Korea
Nepal	*South Vietnam
Netherlands	SEE Vietnam
SF Holland	South West Africa
Netherlands Antilles	USE Namibia
New Caledonia	Southern Yemen
New Hebrides	USE Democratic Yemen
New Zealand	Spain
Nicaragua	*Spanish Sahara
Niger	SEE Western Sahara
Nigeria	Sri Lanka
North Korea	SF Ceylon
SF Korea	Sudan
*North Vietnam	Surinam
SEE Vietnam	Swaziland
Norway	Sweden
Oman	

(Continued)

Switzerland	Upper Volta
Syria	Uruguay
Taiwan	USSR
SF Formosa	SF Russia
UF Nationalist China	Vatican City State
*Tanganyika	Venda
SEE Tanzania	Venezuela
Tanzania	Vietnam
SF Tanganyika	SF North Vietnam; South Vietnam
Thailand	West Germany
Togo	UF Federal Republic of Germany; German Federal Republic
Tonga	*West Pakistan
Transkei	SEE Pakistan
Trinidad and Tobago	Western Sahara
Tunisia	SF Spanish Sahara
Turkey	Western Samoa
Turks and Caicos Islands	Yemen
Tuvalu	NOTE Yemen Arab Republic
SF Ellice Islands	Yemen (Democratic)
Uganda	USE Democratic Yemen
United Arab Emirates	Yugoslavia
United Kingdom	Zaire
NOTE When appropriate use "country" (see List 2, above)	Zambia
United States	Zimbabwe
NOTE When appropriate, use state or territory name(s)	SF Rhodesia

6. Groups (Ethnic) (Category 08)

This category contains the names of groups of people related by ethnic, cultural, racial, or national factors.

a. Plural versus Singular

American Indian groups are entered in the singular (see special instructions under item "d" below). All other groups are entered in the plural form. Examples are:

Africans
British
Canadians
English Canadians

b. Group Names versus Language Names

Group names and language names are often homographs. The convention observed by ERIC is to modify the group name to distinguish it from the language name. For example,

Group (from IAL)

Language (from Thesaurus)

Apache (Tribe)
Chinese People

Apache
Chinese

c. Identifier Groups versus Descriptor Groups

Some ethnic groups are Descriptors, e.g., Spanish Americans. Indexers must, therefore, check both the *Thesaurus* and the IAL before entering groups in either field.

Some subgroups of an ethnic group must be indexed coordinately using both Identifiers and Descriptors, e.g.,

Indexable Concept

African Children

Index Terms

Identifier: Africans
Descriptor: Children

d. American Indians

An American Indian group may be designated as a tribe, band, people, or nation. American Indian groups are not pluralized but are entered in the singular form, e.g., Apache (Tribe) not Apaches. Examples are:

Aleut (Tribe)	Cherokee Nation
Cheyenne (Tribe)	Navajo (Nation)
Chippewa (Tribe)	Pueblo (People)
Cherokee (Tribe)	

All American Indian groups may be further subdivided. In such cases, the specific subgroup should be qualified by the name of the larger group, e.g.,

Laguna (Pueblo)

Certain broad American Indian group names that are neither tribe, band, nor nation, emanate from the discipline of anthropology and can be qualified as such to indicate to non-specialists that the terms are well-defined and authoritative, e.g.,

Plains Indians (Anthropology)

The spelling and format of all American Indian names not originating at the ERIC Clearinghouse on Rural Education and Small Schools must be verified with the appropriate subject specialist at that Clearinghouse, who is aware of the expressed preferences of specific American Indian groups.

For consistency throughout the system, the following indexing conventions should be observed when indexing American Indian groups:

AMERICAN INDIAN GROUP BEING INDEXED	PREFERRED METHOD
<ul style="list-style-type: none"> ● those residing in the 48 contiguous United States 	Descriptor: American Indians Identifier: Tribe Name; State (if appropriate)
<ul style="list-style-type: none"> ● those residing in Alaska 	Descriptor: American Indians; Alaska Natives Identifier: Tribe Name
<ul style="list-style-type: none"> ● those residing in Canada 	Descriptor: American Indians; Canada Natives Identifier: Tribe Name; Province (if appropriate)
<ul style="list-style-type: none"> ● those residing in Western Hemisphere, south of the Rio Grande 	Descriptor: American Indians Identifier: Tribe Name; Country (if appropriate)

e. Miscellaneous

Persons residing in the United States who are commonly referred to in the literature as "Americans" should be indexed by the Identifier:

Americans (United States)

7. Groups (Occupations) (Category 09)

This category contains the specific or collective names of occupations. All group names are formed and pluralized in accordance with the current *Dictionary of Occupational Titles* (U.S. Department of Labor). This ensures that occupational titles used by ERIC are in sex-neutral formats.

Examples are:

Contract Officers
Conveyor Operators
Editors
English Teachers
Foundry Occupations
Line Repairers
Procurement Personnel

Because ERIC is an education-related data base and not one emphasizing labor or business, occupational group names should not be created with excessive specificity. In addition, since the ERIC Thesaurus already contains many occupational groups, it should always be consulted before new Identifiers are created. The following consolidations illustrate both guidelines:

PREFERRED TERM	NON-PREFERRED IDENTIFIER(S)
Textile Occupations (Identifier)	Folders (Garment) Knitting Machine Operators Yarn Winders
Nurse Practitioners (Identifier)	Visiting Nurses School Nurse Practitioners
Laundry Drycleaning Occupations (Descriptor)	Hand Pressers Shirt Pressers Laundrymen Laundry Bundlers

Each occupation has a corresponding activity. Often the only difference between the two is the ending, with the occupation ending in "-ers" or "-ors" and the activity ending in "-ing." There is no general rule for preferring one word form over the other and the literature itself generally dictates which form is first used for indexing. However, both forms are usually not needed in the same vocabulary and if one already exists the other should not be created. For example, given a document on the training of woodworkers, use the existing Descriptor "Woodworking." Do not establish a new "Woodworkers" population term. Cover the population with the existing Descriptors "Semiskilled Workers" or "Skilled Workers," as appropriate.

NOTE: Occupation/Activity overlaps currently exist between some Identifiers and/or Descriptors. These are reviewed as detected and generally the Identifier is discontinued in favor of one or more Descriptors (to which postings are transferred). A current example of this type is the Identifier "Carpentry" and the Descriptors "Carpenters" and "Woodworking."

8. Groups (Other) (Category 10)

This category gathers together population groups which share one or more characteristics, excluding ethnic or occupational characteristics.

Examples are:

Consumers
English Majors
Nondegree Students
Tenants

All term forms are plural.

Population groups whose unifying characteristic is a philosophy or religion should not be created as a group name but should be indexed under the name of the philosophy or religion, e.g.:

PREFERRED	NON-PREFERRED
Atheism	Atheists
Nazism	Nazis

9. Health-Related (Including Psychology) (Category 11)

This category contains the names of diseases, sicknesses, and disorders. In addition, it contains terms related to medicine, physiology, nutrition, and drugs. Psychology and mental health are included. However, health-related equipment is assigned to Category 4—Equipment.

Examples are:

Approach Avoidance Conflict
Aspirin
Chromosomes
Dependency (Personality)
Electromyography
Hemoglobin
Noonan Syndrome

Many medical concepts have both an English and a Latin name. Selection of the appropriate name in these instances should depend on usage by the medical profession. A primary reference for determining this usage is the National Library of Medicine's *Medical Subject Headings—Annotated* (MeSH). MeSH should also be considered the authority for resolving any spelling variances.

Psychological terms are heavily represented in this category. The primary reference that should be consulted to determine usage, format, and spelling is the American Psychological Association's *Thesaurus of Psychological Index Terms*. Terms in the field of psychology are prone to being homographs and as a result must often be qualified in order to distinguish them properly.

Examples are:

Crystallization (Psychology)
Dependency (Personality)
Retroaction (Psychology)
Specimen Records (Behavior)
Stress (Biology)
Stress (Psychology)

Parenthetical qualifiers/modifiers should be in the same format as in the ERIC *Thesaurus*.

NOTE: Some older qualifier/modifier formats still exist in the Identifier file and are gradually being converted.

Many of the Identifiers in this category eventually become Descriptors. For this reason, indexers contemplating the establishment of a new health-related Identifier should always take particular care to check the ERIC *Thesaurus* first. The Descriptor Group "Physical and Mental Conditions" is one good means of conducting such a review.

10. Historical/Special Events (Category 12)

This category contains the names of special days, movements, historical periods, and periodic events usually having a state, national, cultural, or historical significance. Examples are:

Jacksonian Era
Korean War
National Library Week
Nineteenth Century

Names of events that could be homographs should have geographic location, date, or other qualifier added, e.g.:

Cultural Revolution (China)
Depression (Economic 1929)

Class trips, special days honoring local individuals, and events that have very limited usefulness in themselves as index terms should not be established but should be represented by more generic Identifiers or Descriptors, e.g.:

NON-PREFERRED	PREFERRED	
	DESCRIPTOR	IDENTIFIER
Yellow Ribbon Day	Class Activities	Turkish Hostages
Harvard 1980 Reunion	Alumni	Class Reunions Harvard University MA

11. Languages/Linguistics (Category 13)

This category contains the proper names of languages, as well as all other language linguistic-related concepts, grammatical, syntactical, and speech-related terminology.

Examples are:

Bahnar
Balto Finnic Languages
Bangkok Dialect
Bitransitive Clauses
Commas
Connectives (Grammar)

The ERIC *Thesaurus* contains many languages and should always be consulted before adding any language names to the Identifier field. Subdivisions and dialects of languages are generally not in the *Thesaurus* and should be entered as Identifiers. In order to keep all terms concerning a given language together, the Identifier is created with the main language first followed by the subdivision, dialect, or other qualifier, e.g.:

English (British)
English (Canadian)
Turkish (Ottoman)

Ethnic groups and their corresponding language are often spelled the same in common usage. The guidelines in Category 8—Groups (Ethnic) describe methods to distinguish group from language, e.g.:

CONCEPT	PREFERRED	
	DESCRIPTOR	IDENTIFIER
People of Greece		Greeks
Language of Greece	Greek	
Tlingit (Eskimo language)		Tlingit
Tlingit (Eskimo tribe)		Tlingit (Tribe)

NOTE: The language of the document itself should not be indexed in the Identifier field. A special field (LANG) exists for specifying the language of the document.

12. Laws/Legislation (Category 14)

This category contains laws, enacted and proposed legislation, court cases, and legal concepts that are the subject of a document. Examples of typical terms in this category are:

Bakke v Regents of University of California
Civil Rights Act 1964 Title IV
Civil Rights Act 1964 Title VI
Comprehensive Employment and Training Act
Eminent Domain
H R 77 (94th Cong 1st Sess)
Lau v Nichols
Library Act 1972 (Great Britain)
Teacher Tenure Act (Michigan)

Legislation that establishes a program under which a given document is funded should not be confused with the document's subject.

Identifiers in the "Laws/Legislation" category exhibit more variations in the literature in which they occur than those in any other category. While standard citations exist in the formal legislative literature, it is common for authors to refer to legislation simply by "Title" number, assuming that the reader will know by the context the specific act that is being referenced. At the same time, the nature of the material is such that it is often of great interest to the education community, and large numbers of postings may be generated for a single law or court case. It is, therefore, incumbent on indexers to exercise special care in creating new Identifiers for this category.

a. "Short Titles" and Popular Names

Legislation should generally be entered by official "short titles," frequently assigned as convenient labels at the time the legislation (especially Federal) is formally enacted. Example:

PREFERRED "SHORT TITLE"	NON-PREFERRED FORMAL DESIGNATOR
Higher Education Act 1965	Public Law 89 329

Sometimes, however, "short titles" are less known and less frequently used than other "popular" names. Example:

PREFERRED POPULAR NAME	NON-PREFERRED "SHORT TITLE" (AND) FORMAL DESIGNATOR
Fulbright Hays Act	Mutual Educational and Cultural Exchange Act 1961 Public Law 87 256

Although much legislation is identified by the word "Act," another frequent designator is the word "Program." Examples:

Guaranteed Student Loan Program
National Defense Student Loan Program

While technically they are legislative acts, such "programs" fall within Identifier Category 19—Projects/Programs.

Because of the multiplicity of alternative name forms in this category and the difficulties inherent in the task of choosing the "most popular" name, appropriate USE/UF cross-references in the IAL become essential in leading indexers to the preferred terms.

b. "Title" Numbers

Federal legislation is typically subdivided into "Titles" (identified always by Roman numerals). Title numbers may be appended to the end of broad names of legislation to create narrower and more distinctive Identifiers. Example:

Social Security Act Title XX

A broad name without subdivision, such as "Social Security Act," should be used only when the document truly deals with the entire body of legislation represented by the name of the act.

The Title number alone should never be used as an Identifier, as it has meaning only in relation to a particular act. There are rare circumstances, however, in which a piece of legislation becomes commonly known only by its Title number and never acquires a popular name. An example is Title IX of the Education Amendments of 1972, which deals with sex discrimination. In such a situation, it is permissible to use the Title number preceding the legislation of which it is a part, e.g.:

Title IX Education Amendments 1972

This form, however, should be avoided as much as possible.

Like broad legislative name forms, sometimes individual legislative "titles" also become better known and more widely cited by other names. In these cases, the more "popular" name forms are chosen as preferred Identifiers. Examples:

PREFERRED POPULAR NAME	NON-PREFERRED "TITLE" NAMES
Emergency School Aid Act 1978	Education Amendments 1978 Title VI
Ethnic Heritage Studies Program	Elementary Secondary Education Act Title IX E

c. Year

Whenever possible, if the 50-character limit permits, the year that the legislation was enacted should be appended as an integral part of the Identifier. In some cases, citing the year can be imperative in order to distinguish separate laws bearing the same basic name, e.g.:

Civil Rights Act 1871
Civil Rights Act 1957
Civil Rights Act 1964

These citations normally would contain the word "of," as in "Civil Rights Act of 1964." In all such cases, "of" is removed as part of the preferred Identifier.

d. Public Law Numbers

Public Law numbers, e.g., "Public Law 92 318," should always be avoided as Identifiers unless there are no alternative "short titles" or popular names to use.

e. Proposed Federal Legislation

Proposed Federal legislation is entered in the IAL only in the form of a House or Senate Bill number. A House Bill is preceded by "H R"; a Senate Bill by "S." Since Congressional Bill numbers begin again with each new Congress (i.e., every two years), it is essential to follow the Bill number by the number and session of the Congress in order to identify it uniquely, e.g.:

S 6 (93d Cong 1st Sess)

Because of the relatively brief "life spans" of such concepts, they are usually avoided as Identifiers. They are justified

as Identifiers only if they have considerable significance for the field of education and promise to have more than one posting in the ERIC data base.

f. State and Foreign Legislation

State legislation (or the legislation of a Canadian province) should be entered under its name followed by the name of the state (or province) in parentheses, e.g.:

Public Employment Relations Act (Michigan)

State legislation may be subdivided into titles, chapters, etc. As with Federal legislation, the most commonly used form is chosen as the preferred Identifier, with cross-references from non-preferred forms added to the IAL as needed.

Legislation of countries other than the United States should be entered in the same manner, e.g.:

Education Act 1968 (Kenya)
Endowed Schools Act 1869 (England)

In a few instances, the name of the state, province, or country precedes the legislative citation in the IAL. This occurs when the legislation's name could not be specifically verified or when the citation is a collection of codes for the area.

g. Court Cases

Court cases should be entered with the plaintiff and defendant cited in the same manner as in the original legal brief and not augmented. Example:

PREFERRED FORM	NON-PREFERRED FORMS
Brown v Board of Education	Brown v Topeka Board of Education
	Brown v Board of Education of Topeka

NOTE: "v" (not "vs") is always used as the abbreviation of "versus."

Court case names may vary in the way they are cited in the popular literature (even to the point that the plaintiff and defendant can get reversed!). However, for indexing

purposes, the original case name should continue to be used as the preferred Identifier as long as the case itself is an indexable concept in the literature.

Court decisions that may have an impact on educational practices or programs (as the Lau decision on bilingual education programs) should be indexed under the original court case name and not colloquially. Example:

PREFERRED FORM	NON-PREFERRED COLLOQUIALISM
Lau v Nichols	Lau Decision

h. Truncation

Names of legislation may easily exceed the 50-character Identifier limitation, particularly when Title numbers, years, state names, etc. are added to the basic citation. Indexers should follow the truncation rules set forth in the general guidelines of this section. Truncation should be standardized for a specific act in such a way that all subdivisions of that act will file alphabetically in sequence. Example:

PREFERRED FORMS	NON-PREFERRED FORM
Elementary Secondary Education Act	Elementary and Secondary Education Act 1965
Elementary Secondary Education Act Title I	

i. Authorities

Two principal authorities helpful in verifying and standardizing legislation names are the following:

- *A Compilation of Federal Education Laws as Amended Through June 30, 1977* (House Committee on Education and Labor and Senate Committee on Human Resources, June 1977)
- *Catalog of Federal Domestic Assistance* (revised annually by the Office of Management and Budget)

13. Methods/Theories (Category 15)

This category contains the names of a wide variety of methods, techniques, procedures, theories, standards, and models, both general and specific. Examples are:

Monte Carlo Methods	Planning Programming Budgeting System
Montessori Method	Rasch Model
Piagetian Theory	Rehearsal Strategies

Caution should be exercised in creating Identifiers in this category when the name of the method, theory, etc., begins with the name of the author of the document being indexed. Unless the author is very well known, it may be better to index by the subject matter of the method. The indexer could then choose to also index the name of the author, or to not index the name and to let the searcher coordinate the Descriptors/Identifiers with the Author field. Example:

CONCEPT	POSSIBLE INDEXING
Smith's Theory of Educational Counseling	DESC: Educational Counseling; Counseling Theories IDEN: Smith (Jill A) OR Use above Descriptors alone, and let searcher check the Author Field

Should the method/theory or its author eventually become well enough known to be cited by others, then the name of the concept as cited can be considered for a possible new Identifier.

Coined terminology often is assigned to the Methods/Theories category. Coined names frequently appear in documents on research projects, and their use as Identifiers is discouraged except in situations where the author/researcher is well known. Conservatism in establishing such terminology will prevent a profusion of once-posted terms.

There is a conceptual overlap between the Methods/Theories category and both the Curriculum Areas and Projects/Programs categories.

14. Miscellaneous (Category 16)

This category contains a potpourri of terminology not appropriate to the other categories and not in sufficient numbers or "clumps" to form additional defined categories. The terms in this category come from such areas as athletics, philosophy, business, and literature. Many terms in this category later become Descriptors, if warranted by usage. Examples:

Audits	Gatekeeper Role
Bowling	Maternity Benefits
Buddhism	Newbery Award
Chicano Literature	Noncontact Sports
Gallup Poll	Teacher Surplus
Gardening	White Flight

15. Organizations/Institutions (Category 17)

This category contains the names of specific organizations of all types: government agencies, legislative bodies, foundations, school districts, professional societies, and community, educational, and industrial institutions. All names are entered as completely as space permits. Examples are:

4 H Clubs
Advisory Council on College Chemistry
American Association for Advancement Science
American Telephone and Telegraph Company
Army
Bureau of Indian Affairs
California State Department of Education
City Colleges of Chicago IL Malcolm X College
Congress 96th
Department of Health Education and Welfare
Department of Education
ERIC
ERIC Clearinghouse on Urban Education
Kellogg Foundation
Mid Continent Regional Educational Laboratory MO
National Institute of Education
New York City Board of Education
Open University (Great Britain)
Social Science Education Consortium
Station WQED TV PA
Station KPFT Radio TX
Supreme Court
UNESCO
University of California Los Angeles

The creation and use of organizational names as Identifiers is governed by the following general rules:

- If an organization is the subject of a document, it is permissible to enter the organization's name as an Identifier. Examples of types of documents in which this would be true are:
 - Document A: Policies of the Miami School Board
 - Document B: Listings of projects funded by the National Institute of Education
- If an organization is the preparer, source, sponsor, or funding agent, but not the subject of the document, then it is not permissible to enter the organization's name as an Identifier. The Institution and Sponsoring Agency fields exist to capture the names of organizations having these other relationships.
- If an organization is involved both as the subject and the source of the document, then use of both the Identifier and Institution (or Sponsoring Agency) fields is permissible. An example is the document *The National Institute of Education—Its First Five Years*, written about NIE and funded or published by NIE.

a. Geographic Designators

Different organizations in different locations may have the same basic name. For example, there are over ten "Jefferson County School Districts," over four "Union Colleges," etc. If these names were entered without geographic designation, they could not be distinguished from each other and retrieval would suffer. For this reason, all United States and Canadian organizations requiring a geographic designator must have the state or province postal code appended, except for national Canadian organizations which would have the modifier "Canada" appended (in parentheses). Organizations of other countries requiring a geographic designator must have the country name appended (in parentheses). Organization Identifiers with no specific geographic referents are assumed to refer to U.S. organizations.

Certain kinds of organizations, however, do not require geographic designations. The sections that follow distinguish those that do not require location information and those that do.

(1) Organizations NOT Requiring Geographic Designator

Any organization that has the name of a state or country as part of its name need not have that information repeated as part of the Identifier. Large commercial

firms or not-for-profit organizations having multiple outlets or locations, agencies of the U.S. Government, and national U.S. professional associations also do not require a geographic designator. Examples:

American Association of Retired Persons
Coast Guard
Congress 96th
Department of Education
Digital Equipment Corporation
Dow Chemical Company
Eastern Arizona College
Episcopal Church
Florida State Library
Ford Foundation
National Council of Teachers of English
*New York City Board of Education
*Oklahoma City University
Senate Subcommittee on Education
University of Maryland College Park

*NOTE: Organizations with city names that include the name of the state in which they're located, also need not carry a further geographic designator.

(2) Organizations Requiring Geographic Designator

In each of the following examples, a geographic designator is added either in order to differentiate the name from others like it or because the location adds an important dimension to the name that could bear on retrieval.

CAMPS:	Camp Cuyamaca CA
CENTERS:	Center for Philosophic Exchange NY East West Center HI
DAY CARE CENTERS:	Casper Day Care Center WY
FOREIGN ORGANIZATIONS:	Alcohol Education Centre (England) Education Corps (Iran) Federal Parliament (Yugoslavia)
HOSPITALS:	Boston Childrens Hospital MA
LIBRARIES:	Butte County Public Library CA East Saint Louis Public Library IL
MILITARY FACILITIES:	Davis Monthan Air Force Base AZ

...Continued

MUSEUMS:	Baltimore Museum of Art MD
NEWSPAPERS:	Chicago Daily News IL Dayton Journal Herald OH
RADIO AND TV STATIONS:	Dover Educational Television Ctr (Great Britain) Station WNYC NY Station WTTW IL
RESERVATIONS:	Canoncito Navajo Reservation NM Flathead Indian Reservation MT
SCHOOL DISTRICTS:	Abernathy Independent School District TX Clark County School District NV
SCHOOLS/ COLLEGES:	Abraham Baldwin Agricultural College GA Academy of Pedagogical Sciences (USSR) American University DC Brock University ON Decroby School of Barcelona (Spain) Dublin College of Speech Therapy (Ireland) Flynn Model Elementary School RI Forty Fry High School OH University of Edinburgh (Scotland)
ZOOS:	Bronx Zoo NY

The official postal codes for the United States and Canada are displayed in Figure VIII-2-10.

SPECIAL NOTE ON CANADA:

Canadian organizations were originally treated just as those from other foreign countries, with the modifier "Canada" added in parentheses. However, all new Identifiers should now use the appropriate Canadian postal codes shown in Figure VIII-2-10. Of course, national Canadian organizations still require the parenthetical qualifier "Canada," to distinguish them from national U.S. organizations.

b. Associations and Societies

Educational, social, professional, cultural, or community associations and societies should be entered as completely and accurately as possible within the 50-character limitation. Indexers should follow the truncation rules set forth in the general guidelines of this section.

No association Identifier should be created without verifying wording, existence, and spelling. One useful verification source is the *Encyclopedia of Associations*. A document may refer to the American Association of Schools

Alabama	AL	Oklahoma	OK
Alaska	AK	Oregon	OR
Arizona	AZ	Pennsylvania	PA
Arkansas	AR	Rhode Island	RI
California	CA	South Carolina	SC
Colorado	CO	South Dakota	SD
Connecticut	CT	Tennessee	TN
Delaware	DE	Texas	TX
Florida	FL	Utah	UT
Georgia	GA	Vermont	VT
Hawaii	HI	Virginia	VA
Idaho	ID	Washington	WA
Illinois	IL	West Virginia	WV
Indiana	IN	Wisconsin	WI
Iowa	IA	Wyoming	WY
Kansas	KS	Canal Zone	CZ
Kentucky	KY	District of Columbia	DC
Louisiana	LA	Guam	GU
Maine	ME	Puerto Rico	PR
Maryland	MD	Virgin Islands	VI
Massachusetts	MA	CANADA	
Michigan	MI	Alberta	AB
Minnesota	MN	British Columbia	BC
Mississippi	MS	Manitoba	MB
Missouri	MO	New Brunswick	NB
Montana	MT	Newfoundland	NF
Nebraska	NE	Northwest Territories	NT
Nevada	NV	Nova Scotia	NS
New Hampshire	NH	Ontario	ON
New Jersey	NJ	Prince Edward Island	PE
New Mexico	NM	Quebec	PQ
New York	NY	Saskatchewan	SK
North Carolina	NC	Yukon Territory	YT
North Dakota	ND	Labrador	LB
Ohio	OH		

FIGURE VIII-2-10: OFFICIAL POSTAL CODES OF THE UNITED STATES AND CANADA

of Dentistry, the American Association for Dental Schools, or the Association of American Dental Schools when, in fact, the correct organization name is the American Association of Dental Schools. Indexers have the responsibility of verifying all association names before posting them as Identifiers.

All rules for geographic designators, including the use of U.S. and Canadian postal codes, apply to the creation of association Identifiers. Examples:

Audio Visual Education Association of California

Future Farmers of America

NOTE: National Association

Future Farmers of America IL

NOTE: Illinois State Chapter

Southeast Council for Exceptional Children IL

NOTE: Requires postal code; "southeast," although a geographic referent, is ambiguous by itself.

c. Government Agencies

United States Federal government agencies are entered without the words "United States" preceding the Department, Agency, Bureau, Branch, Office, etc. Examples are:

Congress 96th

Department of Education

House of Representatives

National Institute of Education

Navy

State (or provincial) government agencies are entered with the appropriate state (or province) name preceding the agency, e.g.:

Maryland State Department of Education
Ontario Department of Health

All other government agencies—local, municipal, county, foreign, etc.—must have some geographic designator, either within the name itself or as an appended modifier.

In the case of government agencies it is especially important to observe the general rules and guidelines concerning organizations as subjects. A document containing enrollment statistics for Pennsylvania public schools should be indexed by the Descriptor "Public Schools" and the geographic Identifier "Pennsylvania." It should not be indexed by an organization Identifier representing the issuing agency.

The *United States Government Manual* is the principal authority to be used for Federal agency names. *Patterson's American Education* should be used for State education agencies.

d. Institutions of Higher Education

The names of institutions of higher education (i.e., universities, colleges, junior colleges) should be entered in natural word order and not inverted (as in COSATI corporate author cataloging, and the ERIC Source Directory). Example:

PREFERRED FORM	NON-PREFERRED FORM
University of Wisconsin	Wisconsin University

Institutions with several campuses or levels should be subdivided, as appropriate. For example, the State University of New York (SUNY) system has many separately administered subdivisions, and Identifiers for some of these follow:

State University of New York
(Note: Use when entire system is subject.)

State University of New York Buffalo

State University of New York Coll at Cortland

State University of NY Agric Tech Coll Alfred

Other major university systems with many subdivisions are:

City Colleges of Chicago
City University of New York
University of Hawaii

Academic libraries are normally indexed by the parent institution and not entered separately.

The *Education Directory—Colleges and Universities*, produced annually by the National Center for Education Statistics (NCES) is to be used as the authority for the names of higher education institutions. Other directories frequently employ variable formats for purposes of arrangement, indexing, etc., and, because of this, should not be used for purposes of Identifier verification. The NCES directory specifically reports name changes, mergers, etc.

The *World of Learning* should be used as the authority for the names of higher education institutions outside of the United States.

All higher education institution names should be verified using the above authorities. Occasionally, in the past, indexers have entered fictitious institution names as Identifiers, not realizing that such names were "invented" by authors for the purpose of theoretical studies.

e. K-12 Educational Institutions

School district names are usually the lowest subdivisions necessary for retrieval of K-12 institutions. Identifiers for specific elementary schools and high schools should generally be avoided in favor of the name for the overall school district. Various name forms exist for local public school systems, and these differ widely from state to state. Also, local systems are frequently inconsistent in how they refer to themselves. *Patterson's American Education* should be used in an effort to determine an "official" name.

Usually one Identifier is sufficient to represent the subject of a particular local school system. The admitted distinctions among the board of education, unified school district, public school system, etc., for one locality are generally not sufficient to justify creating separate Identifiers for each entity. Example:

PREFERRED FORM	NON-PREFERRED FORMS
Philadelphia School District PA	Philadelphia City Schools Philadelphia Public Schools Philadelphia Public School System Philadelphia Board of Education

Documents dealing with various subjects pertaining to a given public school system (e.g., students, policies, etc.) should not be indexed by the geographic Identifier unless they also deal with the community at large. Examples:

Topic:	Integration policies of Boston Public School District
Use:	Boston Public Schools MA
Do Not Use:	Massachusetts (Boston)
Topic:	Housing patterns and school integration policies in Boston
Use:	Boston Public Schools MA and Massachusetts (Boston)

16. Personal Names (Category 18)

This category contains the names of actual (not fictional) individuals used as the subjects of documents. Fictional characters, for which there are few Identifiers, are assigned to Category 16—Miscellaneous. Methods and theories named after a person are assigned to Category 15—Methods/Theories. Examples:

Adams (Abigail)	Drake (Sir Francis)
Agathe (Saint)	Edward VII
Alcott (Louisa May)	Euclid
Baum (L Frank)	Goethe (Johann Wolfgang von)
Bloom (Benjamin S)	King (Martin Luther Jr)
Byron (Lord George Gordon)	Loyola (San Ignacio de)
Catherine of Siena (Saint)	Mao Tse Tung
Champlain (Samuel de)	Newman (Cardinal John Henry)
Chaplin (Charlie)	O Neill (Eugene)
Chomsky (Noam)	Piaget (Jean)
Clarendon (Edward Hyde 1st Earl of)	Plutarch
Cummings (E E)	Shakespeare (William)
De Gaulle (Charles A)	Skinner (B F)

The individual's surname is entered first, with the given name, etc. normally following in parentheses. When surname and first name are the same (e.g., Chinese names), no parentheses are used. As with all Identifiers, no special characters other than parentheses should be used; initials should be separated by a space.

Use the name by which an individual is commonly identified (whether a real name, assumed name, nickname, title of nobility, or other appellation). Standard references such as the *Encyclopedia Americana* should be used to determine appropriate name forms. Examples where common usage varies from official name are as follows:

PREFERRED	NON-PREFERRED
Carter (Jimmy)	Carter (James Earl)
Eliot (T S)	Eliot (Thomas Stearns)
Moliere	Poquelin (Jean Baptiste)
Twain (Mark)	Clemens (Samuel Langhorne)

Do not enter two individuals having the same last name as one Identifier, no matter how closely associated the two may be, e.g.:

Smith (John) not Smith (John and Jill)

Computer systems, software, and equipment are commonly named after individuals, particularly after famous persons such as the Greek philosophers. It is necessary in these situations to qualify one or more of such terms in order to differentiate them and avoid the creation of homographs, e.g.:

PLATO	Computer system
Plato of Athens	Greek philosopher
ARISTOTLE (Computer Program)	Computer system
Aristotle	Greek philosopher

17. Projects/Programs (Category 19)

This category contains the names of specific projects, programs, studies, and surveys. Examples:

Chemical Education Materials Study
Community Coordinated Child Care Program
Linguistic Bibliography Project
Mobilization for Youth
National Assessment of Educational Progress
Operation SEEK
Project Search
Project Search for Preventive Approaches
Project SPACE
Right to Read
Upward Bound

a. Acronyms

The general guideline is to avoid acronyms as Identifiers wherever possible. However, in those cases where projects are most commonly known by their acronyms, e.g., Project SPACE, such names maybe used. The IAL cross-reference capability can be used to lead from spelled-out version to acronymic version (and vice versa), if appropriate. Whenever a project has both a spelled-out name and an acronym name, both should appear in the Abstract regardless of which one is selected as the Identifier.

b. Homographs

Project/program names provide many opportunities for homographs. Capitalization and spacing are sometimes the only clues that a project/program listed in the IAL may not be the same as the one dealt with in the document being indexed. Examples:

Project Out Reach
Project Outreach
Project OUTREACH

If a project/program mentioned in a given document is different in spacing or case from a project/program name in the IAL, it is dangerous to simply assume that they are the same. The indexer should either verify the identity of the name in the IAL by examining the earlier accessions (postings), or should create a new Identifier that matches the new format found in the document but, also, that differs from the earlier Identifier by something other than spacing or case.

When comparing terms to see whether they are duplicated, the ERIC computer system first compresses the term by removing blanks and special characters and then converts all characters to upper case. For this reason, terms cannot be differentiated solely on the basis of spacing or case. In order to differentiate homographs, it is necessary to add characters. Two acceptable methods are:

- (1) Adding a subject qualifier, e.g., "Project EUREKA (Electrician Training)"
- (2) Adding a geographic/postal designator, e.g., "Project EUREKA MN"

c. Overlap with Curriculum Category

Project/program names frequently overlap with Identifiers in Category 3—Curriculum Areas. Indexers should take care to avoid duplication between these two categories.

18. Science and Technology (Category 20)

This category contains terms pertaining to the physical and earth sciences. It excludes the health/medical sciences (Category 11) and general curriculum areas covering the physical/earth sciences (Category 3). It includes mathematical concepts and technological applications of scientific knowledge. Examples:

Aquaculture	Earthquakes
Algae	Factoring (Mathematics)
Biofuels	Geometric Constructions
Biological Control	Quasars
Black Holes	Radioactivity
Cinefluorography	Reptiles
Coal Gasification	Toxic Substances
Constellations	Triangles
Copper Chromate	Venn Diagrams
Diamonds	Wind Erosion
Dry Ice	Zero Population Growth

ERIC is not primarily a science and technology data base and, therefore, in creating new Identifiers for this category, excessive specificity should be avoided, e.g.:

PREFERRED	NON-PREFERRED
Monkeys	Rhesus Monkeys Squirrel Monkeys

Terms in this category should be formatted similarly to Descriptors in the "Science and Technology" Descriptor Group. The principal lexicographic authority for use with this category of Identifiers is the *Thesaurus of Engineering and Scientific Terms* (TEST).

19. Tests/Testing (Category 21)

This category contains the names of specific tests, general test batteries, statistical terms related to testing, and various concepts related to inventories, searches, samples, surveys, measurement, and evaluation. Examples:

- ACT Assessment
- Bender Gestalt Test
- College and University Environmental Scales
- Edwards Personal Preference Schedule
- General Aptitude Test Battery
- Iowa Tests of Basic Skills
- Minnesota Multiphasic Personality Inventory
- Raven Progressive Matrices
- School and College Ability Tests
- Stanford Achievement Tests
- Watson Glase Critical Thinking Appraisal

The authority to be used for the names of most published tests is *Buros' Mental Measurements Yearbook*. Tests which cannot be verified in this authority (usually unpublished or research instruments not widely disseminated) should be entered as formally cited in the document being indexed. Tests whose names cannot be established satisfactorily by either of these approaches should be checked with staff of the ERIC Clearinghouse on Tests, Measurement, and Evaluation.

Test names are generally established as Identifiers according to one of two patterns:

- (1) the test name starts with the name of its designer or creator; or
- (2) the test name must be modified by the name of its designer or creator in order to be clearly differentiated from other similarly named tests.

Examples are:

TEST NAMES BEGINNING WITH NAME OF DESIGNER/CREATOR	TEST NAMES QUALIFIED WITH NAME OF DESIGNER/CREATOR
Gates MacGinitie Reading Tests	Adjective Check List (Gough and Heilbrun)
Harvard Project Physics Achievement Test	Behavior Prediction Test (Morrison)

Test names should not be indexed if they are incidental to the research being reported. For example, a report in which the Gates MacGinitie Reading Tests were used to simply group subjects for some purpose should not necessarily be indexed by that test name unless the scores had some bearing on the research results.

Teacher-developed classroom tests, e.g., a series of questions on *Hamlet*, are not normally considered as appropriate Identifiers because they are unlikely to be dealt with by other documents.

20. Titles (Literature and the Arts) (Category 22)

This category contains book titles, report titles, the names of journals, monographic series, plays, poems, television shows, etc. Examples:

1984 (Title)
Abe Lincoln in Illinois
Catcher in the Rye
Future Shock
Graduate (The)
Hamlet
Handbook of Cooperative Education
Homecoming (Pinter)
Huckleberry Finn
Jesus Christ Superstar
Journal of Chemical Education
Miami Linguistic Readers
New York Times
Resources in Education
Roots (Haley)
Young Abe Lincoln

Reports or studies sometimes become best known by the name of the chairperson or chief investigator. If a report becomes regularly cited in this way, and not by its formal or official name, the preferred Identifier should be the name in common usage, e.g.:

PREFERRED	OFFICIAL NAME
Coleman Report	Equality of Educational Opportunity Report

An IAL cross-reference from the official name to the commonly cited name is appropriate in such instances.

Titles that are potential homographs should have a qualifier added as appropriate, e.g.:

1984 (Title)
Carrascoledas (Television Series)
Dead Birds (Title)
Science (Journal)

Common titles that have been used by more than one author should be differentiated by adding the author's name as a qualifier, e.g.:

Homecoming (Hamner)
Homecoming (Pinter)
Homecoming (Sanchez)
Homecoming (Snow)

Books in Print and the *Cumulative Book Index* can be used as authorities to verify the titles of commercially available books.

D. ERIC Facility Identifier Processing Procedures

All incoming Identifiers to RIE and CIJE are validated by computer against the *Identifier Authority List* (IAL). Those not found in the IAL are reviewed by the lexicographic staff for proper format. New Identifiers are cumulated and the IAL updated on a monthly basis. Based on the lexicographic review, the Facility editors make the necessary changes to the RIE input, and recommendations for CIJE Identifiers are routed to the CIJE Contractor for similar implementation.

Concurrently with each *Thesaurus* update, the terms in the IAL which have been made Descriptors or UF's are removed from the IAL. In addition, as part of routine maintenance, and as a result of recommendations received from the Clearinghouses and users, Identifiers may be deleted from the IAL, merged with other Identifiers, or modified in form.

(NOTE: Although the establishment of the IAL obviates the need for the Clearinghouses to keep inhouse lists of all Identifiers used, a current list of Identifiers that are potential Descriptors should be maintained and the necessary Vocabulary Development Forms (Form EFF-73) generated when the postings indicate such action. (See Section 8, Part 1.)



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

SECTION 10 — DATA BASE CHANGES (POST PUBLICATION)

February 1981

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

SECTION X: DATA BASE CHANGES
(POST-PUBLICATION)

DATA BASE CHANGES (POST-PUBLICATION)

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DATA BASE CHANGES (POST-PUBLICATION)

SUMMARY OF SIGNIFICANT RULES

1. Documents and journal articles should not be re-entered (re-accessioned) in the data base and re-announced for the purpose of accomplishing a change to their records or level of availability.
2. Changes to the existing data base post-publication are expensive. Errors affecting contributors, the identity of the document, its availability or price, or its retrievability under important access points should be made. Minor typographical, spelling, or punctuation errors or other errors that do not affect the factors listed above should not be made. The Facility editors are responsible for approving all post-publication changes to the master data base.
3. Lexicographic changes made to the ERIC *Thesaurus* and/or *Identifier Authority List* are reflected, via backfile changes, in all resumes carrying the changed terms.
4. Post-publication changes are made to the data base every six months, immediately prior to preparation of the cumulative indexes.
5. In the case of duplicate records detected post-publication, the "best" record will be retained in full and the other record will be truncated to prevent its retrieval and cross-referenced to the record retained.
6. EDRS Availability changes can be from Level 1 to 2 or 3 or from Level 2 to 1 or 3. There is currently no provision for changing from Level 3 to 1 or 2.
7. Microfiche header and content errors that are caused by EDRS are correctable under the terms of their contract and should be called to their attention.
8. Re-filming and redistribution of a document due to a contributor, Clearinghouse, or Facility error (and not an EDRS error) is expensive and each such recommendation must have the prior approval of Central ERIC.

X. DATA BASE CHANGES (POST-PUBLICATION)

A. Introduction

The purpose of this section is to specify the procedure for making changes to the ERIC data base after the data involved have been announced in RIE or CIJE (or after the abstract journal issue in which the data will be announced has passed its cut-off point for changes).

The cut-off point for both journals is approximately five (5) weeks before its publication date (the first of the month whose name the issue bears) and can be determined precisely from the RIE and CIJE Master Schedules. For example, on the detailed RIE schedule, cut-off is the day before the beginning of the bar labeled "Release" for each issue. Changes prior to that point can be made without restriction by a simple telephone call to the RIE editors at the ERIC Facility (or, in the case of CIJE, the CIJE editors at the CIJE Contractor), with written confirmation following, where appropriate. Changes after that point are subject to the policies and procedures described below.

B. General Policies

1. Re-Announcement

As a matter of general policy, a document or journal article shall not be re-announced or re-entered into the data base as a new accession for the purpose of accomplishing a change to its record. It is not desirable to create essentially duplicate records in the data base because of the long term adverse effect of such duplicates on online retrieval activities. It is preferable to make a change to an existing record and to see that the online data base files are eventually updated with such changed records.

2. Acceptable vs. Non-Acceptable Changes

Changes can be of varying degrees of importance and acceptability. Errors in the Personal Author or Institution fields can be troubling to the contributors of documents and often must be corrected for public relations purposes no matter how small they may be.

Errors in the Title, Journal Citation, Publication Date, or Report Number fields can impact the basic identity of the document and must often be corrected in order for the document to be correctly identified in future transactions.

Errors in the Availability field that would impact the ability of users to obtain the document cannot be tolerated. Similarly, errors in the Pagination or level fields that would create an incorrect EDRS availability or price are important and must be corrected.

Errors in the contract Number, Language, Geographic Source, Publication Type, and Governmental Status fields, while of less urgency because they do not seriously affect either the contributors'

sensibilities, the basic identity of the document, or its availability or price, should nevertheless generally be corrected because they can affect retrieval efforts.

Because of the computer process by which index terms are validated against authority lists, errors in the sense of spelling errors do not normally occur in the Descriptor and Identifier fields. However, terms that are "incorrect" for other reasons should be changed as they have an impact on both printed cumulative indexes and on online retrieval.

Minor changes (e.g., spelling or punctuation) in the Abstract field should not normally be accepted. Abstract field changes are expensive in that the entire field must be re-keyed. Errors in this field do not normally have an effect on the factors referred to previously and can be tolerated without significant harm to the data base. An exception would be the case where two abstracts were accidentally switched. If an entire abstract is incorrect, it should obviously be replaced. Abstractor initials are not significant in any data base application and any errors occurring there need not be corrected post-publication.

As a general rule, any errors which would affect an upcoming cumulated printed index should be corrected.

As a general rule, minor spelling and typographical errors which would have no effect on contributors' sensibilities, document identity, printed indexes, or retrieval operations, need not be corrected post-publication.

3. Responsibility for Making Data Base Changes

Post-publication changes may be recommended by users or any component of the ERIC system. All post-publication change recommendations should be forwarded to the ERIC Facility to the attention of the Facility Editors.

Responsibility for deciding what changes are acceptable and which are not acceptable rests with the ERIC Facility. In difficult or controversial cases, the Facility will get the concurrence of its Central ERIC monitor before taking final action.

In all change situations it is useful to keep in mind that the ERIC Facility is responsible for the integrity of the ERIC Master Magnetic Tapes and the ERIC Document Reproduction Service is responsible for the integrity of the microfiche master rolls.

4. Vocabulary-Based Changes

The ERIC Facility (Lexicography Department) is responsible for making backfile changes based on lexicographic changes made to the ERIC Thesaurus and/or the Identifier Authority List. In such cases,

all resumes on the ERIC files affected by the terms being changed are changed to agree with the latest lexicographic decisions. When such changes involve the deletion of terms and their transfer to another term or terms (e.g., Identifier to Descriptor), they are called "Transfer and Delete" transactions.

5. Schedule for Making Changes

Changes to the RIE and CIJE backfiles require the total re-duplication of the backfile and for economic reasons cannot be made frequently.

While recommended changes may range across the entire data base, the majority usually concern relatively recent announcements and therefore should be accomplished in time for the Semiannual and Annual Cumulative Indexes.

The schedule for making backfile changes is therefore established as identical to the schedule for the Semiannual and Annual Indexes, as depicted on the RIE Master Schedule, i.e., twice a year.

6. Backfile Update Tapes (for Online Retrieval Vendors)

Once every six months, immediately after completion of each cumulative index and each backfile update, a tape is generated containing the full record of every accession affected by backfile change activity. This tape is duplicated and transmitted to each of the major online vendors, together with a letter of transmittal requesting that the online vendor search files be updated with the revised records.

This updating procedure, involving only a relatively small number of records each time, is to be distinguished from a complete file reload, which requires that all records be replaced.

Backfile update tapes are contract-supported tapes and are not charged to the online vendors.

C. Procedures for Making Changes

1. Clearinghouse Actions

While most recommendations for data base changes come from the Clearinghouses, the procedures noted below also pertain to Central ERIC, the CIJE Contractor, or any other ERIC component submitting a change.

To request a change, a Clearinghouse should send the Facility, in writing, the following information:

- Accession Number (ED or EJ Number) of the document or article to be changed.

- Title of the accession (to insure against error in recording the accession number). A Xerox copy of the resume from the announcement journal is a convenient way to meet this and the above requirement.
- Error detected or change to be accomplished. Please be as specific as possible so that there is no ambiguity in what should be done.
- Justification. (This is optional. It is sufficient to call an error to the Facility's attention and to leave the decision as to whether to correct up to the Facility. However, if the submitter wants a specific outcome, that outcome should be stated and/or defended).
- Supporting Documentation. A copy of any written communication from the document/article author or source, pertaining to the change or providing an explanation of the reason for needing the change, should be attached.

2. Facility Actions

Upon receipt of the change recommendation, the Facility will:

- Verify the way the data in question exist on the Master File.
- Evaluate the change recommendation and decide whether it is acceptable or not acceptable.
- Consult with Central ERIC (via the Facility monitor) on any problem cases or controversial changes.
- If the change is accepted, file it with all other accepted changes to be made at the next scheduled backfile update.
- If the change is not accepted, provide feedback to the submitter, where appropriate.
- Make the change, at the next backfile update (every six months).
- Include the entire changed record on the Backfile Update Tape to be sent to all online vendors.

D. Procedures for Handling Duplicate Records

All duplicates detected in the ERIC Master Files should be brought immediately to the attention of the ERIC Facility. The general procedure is the same as for other kinds of changes. However, the Facility's final action on the file is slightly different in that a record is not so much changed as de-commissioned and taken out of circulation.

When two duplicates are discovered, the Facility must decide which record to keep and which record to, in effect, discard. All other things being equal, the earlier record is retained and the later record (the

one that "duplicated") is discarded. If however, the later-appearing record is clearly the superior record in terms of the indexing and abstracting, or if it has a better level of availability to the public, then it is possible to decide in favor of retaining the later record.

Because the announcement of the duplicate in RIE (or CIJE) has already taken place and because any microfiche has already been distributed, it is felt better to "skeletonize" (see next paragraph) the duplicate record and, by this process, take it out of circulation, rather than to totally expunge it from the tape files. The announcement and distribution that has already taken place cannot be totally negated and therefore it is better for ERIC to retain a record of what has happened than to have the record involved lost.

At the same time, it is not desirable for the duplicate record to continue to emerge as a result of retrieval activities or in various publication by-products. In order to prevent this from happening, the duplicate is "skeletonized." That is, all the data elements that index the record are deleted and a note is inserted that will lead the user to the retained record. The only elements of a duplicate record that are retained are:

RIE: Accession Number, Title, Note (e.g. "Duplicate of ED 123 456").

CIJE: Accession Number, Title, Journal Citation, Annotation (e.g. "Duplicate of EJ 123 456").

The ERIC Facility maintains a Master List of all duplicates detected in the ERIC files post-publication.

E. Special Procedures for Changes Affecting EDRS (e.g., EDRS Availability and Price Changes, Microfiche Header Changes, Refilmings, etc.)

The ERIC Document Reproduction Service (EDRS) is a separate component of the ERIC system, operating under its own contract and scope of work. Errors created by EDRS during filming and microfiche production are corrected by EDRS without additional cost to the Government. Errors in the microfiche caused by other ERIC components may involve a cost to the Government if refiling and/or redistribution are involved. For this reason, change recommendations involving refiling and redistribution require the approval of Central ERIC. Central ERIC also approves all changes involving a reduction in EDRS availability (e.g., Level 1 to Level 2 or 3) based on reproducibility experienced at EDRS.

1. Increasing EDRS Availability

a. From Level 2 to Level 1

(1) Clearinghouse Actions

This change generally occurs when the source cited for paper copy in the original announcement at Level 2 has exhausted its stock and is therefore now willing to let EDRS reproduce in paper copy, as well as in microfiche.

To request a change, a Clearinghouse should send the Facility, in writing, the following information:

- The Accession Number (ED Number) of the document.
- The Title of the document (to insure against error in recording the accession number).
- A copy of the authorization from the source to make the change from Level 2 to Level 1, or a statement to the effect that the Clearinghouse has received such authorization. (Authorization is not required if the source cited in the announcement was GPO.)
- A copy of any written communication from the document source pertaining to the change, or an explanation of the reason for needing the change.

(2) Facility Actions

Upon receipt of the communication from a Clearinghouse, the Facility will:

- Verify the existing Availability Level as it appears on the Resume Master File.
- Schedule required changes to the record for the next backfile correction cycle.
- Determine the paper copy price (via current EDRS price schedules) and inform EDRS, in writing, of the change, providing the information necessary to accomplish the change in their records.
- Keep a permanent file of Level change communications, by ED number.

(3) EDRS Actions

Upon receipt of the change information from the Facility, EDRS will alter its records and files as required and will subsequently fill requests for paper copy as received.

b. From Level 3 to Level 1 or 2

There is currently no mechanism within the ERIC system for changing the availability level of Level 3 accessions. The reasons are technical and relate to the reprographic techniques used to store and duplicate ERIC microfiche.

Due to the heavy demand for back collections of ERIC documents, it is necessary for the microfiche master (and production masters) to be on roll film. It is not possible to splice a previously missing (i.e., Level 3) fiche into the master roll without damaging the adjacent masters.

This limitation on Level 3 accessions can sometimes be cited in attempts to acquire copyright releases from contributors who initially reject giving ERIC Level 1 or 2 permission.

2. Reducing EDRS Availability

a. From Level 1 to Level 2

(1) Clearinghouse Actions

This change generally occurs under one of two circumstances:

- a document has been found by EDRS's actual experience to reproduce inadequately (for sale purposes) in paper copy from the microfiche, or
- a document was mistakenly processed at Level 1 when the source intended to authorize only Level 2.

In the first instance, action usually starts with EDRS. In the second instance, action usually starts with the Clearinghouses.

To request a change, a Clearinghouse should send the Facility, in writing, the following information:

- The Accession Number (ED Number) of the document.
- The Title of the document (to insure against error in recording the accession number).
- A copy of the request from the source to make the change from Level 1 to Level 2, or a statement to the effect that the Clearinghouse has received such a request.
- A copy of any written communication from the document source pertaining to the change, or an explanation of the reason for needing the change.

(2) EDRS Actions

From time to time, EDRS discovers microfiche in the system which will not reproduce satisfactorily in

paper copy. To fall into this category, a significant number of the pages of the document should be illegible upon blowback. Such documents are generally older accessions which were filmed prior to the current evaluation procedures.

When such a document is discovered, EDRS will send Central ERIC, in writing, the following information:

- The Accession Number (ED Number) of the document.
- The Title of the document (to insure against error in recording the number).
- An explanation of the reason that EDRS wants to change the availability of the document.

Central ERIC will evaluate the request. If rejected for any reason, it will be returned to EDRS with an explanation. Approved requests will be properly annotated to this effect and returned to both EDRS and the Facility.

Upon receipt back from Central ERIC of an approved request, EDRS will:

- Adjust its order records to indicate that orders for paper copy will not be filled. Orders for copy will be returned to the customers with an explanation that *they cannot be filled because of the poor quality of the original document.*

(3) Facility Actions

Upon receipt of a justified request from a Clearinghouse (based on source's request), the Facility will:

- Verify the existing Availability Level as it appears on the Resume Master File.
- Schedule required changes to the record for the next backfile correction cycle.
- Inform EDRS, in writing, of the change, providing the information necessary to accomplish the change in their records.
- Keep a permanent file of Level change communications, by ED number.

Upon receipt of an approved EDRS "downgrading" request from Central ERIC, the Facility will perform the first, second, and fourth actions above and will also notify the processing Clearinghouse of the change.

b. From Level 1 or 2 to Level 3

This change which is very infrequent, generally occurs when a document has been mistakenly processed at Level 1 or 2 when the source did not intend to authorize such processing. It may also occur if the document is so illegible that even the microfiche copy is unsatisfactory. The actions required are the same as in the procedure for the Level 1 to 2 change described above.

3. Microfiche Header Changes

If a microfiche header reflects the data as announced in RIE, it is usually better to not make certain corrections. It is preferable to have the microfiche and the RIE announcement agree with one another. This is invariably true with the less significant data elements, such as Publication Date and Pagination, and will often be true also with the more significant data elements (Title, Personal Author, Institution) when the errors are minor in nature. Exceptions are those instances where two microfiche have accidentally switched headers, where the significant data elements are sufficiently in error to either mislead the user or offend the contributor, or where there is an error in the ED number.

In other words, microfiche headers exist for the basic purpose of identifying a given fiche. They are not changed with the same readiness the data base is changed unless the error in the header interferes with this basic function.

However, if a microfiche header varies from the data announced in RIE, it is necessarily an EDRS-generated error and should be called to their attention for routine correction.

4. Re-Filmings

Re-filming and its usual consequence, redistribution, are expensive actions and require the approval of Central ERIC. Most re-filming requests are generated via the Facility's "microfiche inventory and quality control check" and are handled via the routine process of transmitting the results of that check to EDRS. A very few re-filming requests are generated in other ways and are handled on an *ad hoc* basis at those times.



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

APPENDIX A: ERIC Clearinghouse Scope of Interest Guide

April 1987

EDUCATIONAL RESOURCES INFORMATION CENTER

U.S. Department of Education

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INTRODUCTION

The ERIC Clearinghouse Scope of Interest Guide attempts to define the subject areas covered by the ERIC Clearinghouses. This is accomplished in the form of a three-part write-up, as follows:

1. Formal Statement (extensive, detailed write-up for the ERIC Processing Manual, and other formal purposes)
2. Informal Explanatory Notes (for use only within the ERIC network, to make sure that staff know of special arrangements for coverage made among Clearinghouses)
3. Brief Statement (for use in widely disseminated promotional flyers and brochures)

The above narrative statements are followed by an alphabetical listing of terms applicable to a particular scope. The terms are made up primarily, but not necessarily entirely, of Descriptors from the ERIC Thesaurus.

The Guide is used for a variety of purposes, but chiefly to assist in directing documents, on the basis of their subject matter, to the appropriate Clearinghouses for further processing. It may also be used as an aid in indexing a document from the point of view of more than one Clearinghouse.

The scope definitions and the terms have been supplied by the Clearinghouses themselves and are, basically, in their own words. They have been edited at the ERIC Facility for length, standardization of format, and the elimination of ambiguity and redundancy. The Central ERIC monitors have each approved the final scope statements for the Clearinghouses for which they are responsible.

A composite alphabetical list of all terms makes up the final section of the Guide and constitutes, in effect, an overall index to the Guide. It is particularly useful in bringing together terms covered by more than one Clearinghouse, as well as determining which Clearinghouse covers a particular concept.

All significant changes or additions to the scopes of ERIC Clearinghouses should be reported to the ERIC Facility so that they can be issued as updates to this Guide.

ADULT, CAREER, AND VOCATIONAL EDUCATION (CE)

I. ADULT EDUCATION

Scope of Interest

Research, theory, and practice related to adult and continuing education in school, institution, work, and community settings. Includes: adult basic education; university and cooperative extension efforts; employer sponsored training and human resource development; labor/worker education; volunteerism; experiential education; military education; veterans education; distance education for the delivery of adult education; lifelong learning; educational gerontology (as related to the employment of older workers); community education; community development; self-directed learning; non-formal and informal learning; prison education; law enforcement and police training; parent education (when delivered through adult education or home economics programs).

Notes

Does not include educational programs for adults covered by other Clearinghouse scopes, e.g., staff development activities for teachers (SP), continuing professional education for librarians (IR), university/college faculty development (HE), and so forth.

Brief Statement

All levels of adult and continuing education from basic literacy training through professional skill upgrading. The focus is upon factors contributing to the purposeful learning of adults in a variety of life situations usually related to adult roles (e.g., occupation, family, leisure time, citizenship, organizational relationships, retirement, and so forth).

II. CAREER EDUCATION

Scope of Interest

Career development research, theory, and practice from preschool through adult, related to school, institution, and business and industry settings. Includes: self-awareness and self-development; career awareness, exploration, decision making, and planning; occupational choice/knowledge and life roles; career change and advancement; work habits and values; job seeking and job coping skills; pay vs. nonpay issues; career education resource centers and information systems; overcoming bias and stereotyping in career choices; parental involvement in career decisions; curriculum infusion; school/community collaboration; business and industry cooperation; and inservice and preservice education for career education.

Notes

Does not include career guidance and counseling (covered by CG) or career assessment instruments and career education program evaluation instruments (covered by TM).

Brief Statement

Career education for all ages and populations in educational, institutional, business, and industry settings. Includes career development programs to achieve self awareness, career awareness, career decision-making and implementation, and career change and advancement goals. Also includes preservice and inservice education for career development program personnel.

III. VOCATIONAL EDUCATION

Scope of Interest

Vocational and technical education at the secondary, postsecondary, and adult levels for the development of skills needed for employment. Occupational areas covered include: agriculture; business and office; allied health occupations (that require less than a baccalaureate degree); home economics; industrial arts; trade and industrial; technical; marketing and distributive; and consumer-related. Relevant materials encompass curriculum planning and evaluation, personnel development, and teacher training. The scope also includes: correctional education; employment and training programs; youth employment; school-to-work transition; job placement and follow-through; occupational psychology and sociology; internships; apprenticeships, on-the-job training, cooperative education; business/industry/education partnerships; entrepreneurship; vocational rehabilitation; and adult retraining.

Notes

Does not include non-vocational aspects of education for the handicapped (covered by EC), or non-vocational aspects of education for juvenile offenders (covered by CG).

In the overlap area of vocational/career education for the handicapped/gifted, EC and CE have agreed to the following resolution:

EC will be responsible for documents in this area that are:

- sponsored by the U.S. Office of Special Education
- sponsored by state departments of special education
- produced by organizations with which EC already has formal acquisitions arrangements (as determined by the ERIC Acquisitions Arrangements list).

CE will be responsible for all documents in this area not falling under the above criteria.

Brief Statement

Vocational and technical education for secondary, postsecondary, and adult populations, including all service areas, corrections education, vocational rehabilitation, employment and training programs, youth employment, work experience programs, education/business/industry partnerships, entrepreneurship, and adult retraining.

IV. OVERALL CLEARINGHOUSE BRIEF STATEMENT

All levels of adult and continuing education from basic literacy training through professional skill upgrading; vocational and technical education covering all service areas for secondary, postsecondary, and adult populations; career education and career development programs for all ages and populations in educational, institutional, business, and industry settings.

CE APPLICABLE TERMS

ACADEMIC EDUCATION	CAREER AWARENESS
ACCOUNTING	CAREER CHANGE
ADMINISTRATOR EDUCATION	CAREER CHOICE
ADULT BASIC EDUCATION	CAREER COUNSELING
ADULT COUNSELING	CAREER DEVELOPMENT
ADULT DAY CARE	CAREER EDUCATION
ADULT DEVELOPMENT	CAREER EXPLORATION
ADULT DROPOUTS	CAREER GUIDANCE
ADULT EDUCATION	CAREER LADDERS
ADULT EDUCATORS	CAREER PLANNING
ADULT FARMER EDUCATION	CAREERS
ADULT FOSTER CARE	CARPENTRY
ADULT LEARNING	CHILD CARE OCCUPATIONS
ADULT LITERACY	CHILD CAREGIVERS
ADULT PROGRAMS	CITIZEN PARTICIPATION
ADULT READING PROGRAMS	CITIZENSHIP EDUCATION
ADULT STUDENTS	CLERGY
ADULT VOCATIONAL EDUCATION	CLERICAL OCCUPATIONS
ADULTS	CLOTHING INSTRUCTION
AGING	COLLEGE GRADUATES
AGRICULTURE	COMMUNITY ACTION
AGRICULTURAL EDUCATION	COMMUNITY CENTERS
AGRICULTURAL ENGINEERING	COMMUNITY DEVELOPMENT
AGRICULTURAL OCCUPATIONS	COMMUNITY EDUCATION
AGRICULTURAL PRODUCTION	COMMUNITY HEALTH SERVICES
AIRCRAFT PILOTS	COMMUNITY INFORMATION SERVICES
ALLIED HEALTH OCCUPATIONS	COMMUNITY INVOLVEMENT
ALLIED HEALTH OCCUPATIONS EDUCATION	COMMUNITY LEADERS
AMERICAN INDIANS	COMMUNITY ORGANIZATIONS
APPLIANCE REPAIR	COMMUNITY PROGRAMS
APPRENTICESHIPS	COMMUNITY RESOURCES
ARMED FORCES	COMMUNITY ROLE
ARTICULATION (EDUCATION)	COMMUNITY SCHOOLS
AUTO BODY REPAIRERS	COMMUNITY SERVICES
AUTO MECHANICS	COMMUNITY STUDY
AUTO PARTS CLERKS	COMMUNITY SURVEYS
BASIC BUSINESS EDUCATION	COMPENSATORY EDUCATION
BEHAVIOR CHANGE	CONTINUATION STUDENTS
BILINGUAL EDUCATION	CONTINUING EDUCATION CENTERS
BLACK EMPLOYMENT	CONTINUING EDUCATION UNITS
BLACKS	COOPERATIVE EDUCATION
BLUE COLLAR OCCUPATIONS	CORRECTIONAL EDUCATION
BOOKKEEPING	CORRECTIONAL INSTITUTIONS
BRICKLAYING	CORRECTIONAL REHABILITATION
BUILDING TRADES	CORRESPONDENCE SCHOOLS
BUSINESS	CORRESPONDENCE STUDY
BUSINESS CORRESPONDENCE	CRAFT WORKERS
BUSINESS EDUCATION TEACHERS	CREDIT COURSES
BUSINESS RESPONSIBILITY	CRIMINAL LAW
BUSINESS SKILLS	CULTURAL DIFFERENCES
	DAILY LIVING SKILLS
	DATA PROCESSING OCCUPATIONS

DEMAND OCCUPATIONS	ENGINEERS
DEMCNSTRATION CENTERS	ENGLISH (SECOND LANGUAGE)
DEMCNSTRATION PROGRAMS	ENLISTED PERSONNEL
DEMNCNESTATIONS (EDUCATIONAL)	ENTREPRENEURSHIP
DEVELOPMENTAL STAGES	ENTRY WORKERS
DEVELOPMENTAL TASKS	ENVIRONMENTAL INFLUENCES
DICTATION	EQUAL EDUCATION
DISABILITIES	EQUAL OPPORTUNITIES (JOBS)
DISADVANTAGED	EQUIVALENCY TESTS
DISADVANTAGED YOUTH	EVALUATION METHODS
DISMISSAL (PERSONNEL)	EVENING PROGRAMS
DISPLACED HOMEMAKERS	EVENING STUDENTS
DISTANCE EDUCATION	EXPERIMENTAL LEARNING
DISTRIBUTIVE EDUCATION	EXPERIMENTAL PROGRAMS
DRAFTING	EXTENSION AGENTS
DRIVER EDUCATION	EXTENSION EDUCATION
DUAL CAREER FAMILY	EXTERNAL DEGREE PROGRAMS
ECONOMICALLY DISADVANTAGED	FAMILY LIFE EDUCATION
EDUCATION ADMINISTRATION	FAMILY PLANNING
EDUCATION VOUCHERS	FAIR OCCUPATIONS
EDUCATION WORK RELATIONSHIP	FAMLIAS
EDUCATIONAL ATTITUDES	FEDERAL AID
EDUCATIONAL BACKGROUND	FEDERAL PROGRAMS
EDUCATIONAL BENEFITS	FEMALES
EDUCATIONAL CERTIFICATES	FIKE FIGHTERS
EDUCATIONAL DEMAND	FLEXIBLE WORKING HOURS
EDUCATIONAL GEEONTOLOGY	FOLK SCHOOLS
EDUCATIONAL INNOVATION	FOLLOWUP STUDIES
EDUCATIONAL LEGISLATION	FOODS INSTRUCTION
EDUCATIONAL NEEDS	FUNCTIONAL LITERACY
EDUCATIONAL PLANNING	FUNCTIONAL READING
EDUCATIONAL RESEARCHERS	GENERAL EDUCATION
ELECTRICAL OCCUPATIONS	GERONTOLOGY
ELECTRICITY	GOVERNMENT EMPLOYEES
ELECTRONICS	GRAPHIC ARTS
EMERGENCY MEDICAL TECHNICIANS	GROUP DISCUSSION
EMPLOYEE PARENTS	GROUP DYNAMICS
EMPLOYED WOMEN	HEADS OF HOUSEHOLDS
EMPLOYEE ATTITUDES	HEALTH OCCUPATIONS
EMPLOYEES	HEALTH PERSONNEL
EMPLOYER EMPLOYEE RELATIONSHIP	HIGH SCHOOL EQUIVALENCY
EMPLOYERS	PROGRAMS
EMPLOYMENT	HOME ECONOMICS
EMPLOYMENT COUNSELORS	HOME ECONOMICS EDUCATION
EMPLOYMENT INTERVIEWS	HOME STUDY
EMPLOYMENT OPPORTUNITIES	HOMEMAKERS
EMPLOYMENT POTENTIAL	HOSPITALITY OCCUPATIONS
EMPLOYMENT PROGRAMS	HOUSEHOLD WORKERS
EMPLOYMENT PROJECTIONS	HUMAN SERVICES
EMPLOYMENT QUALIFICATIONS	ILLITERACY
EMPLOYMENT STATISTICS	INCOME
ENERGY OCCUPATIONS	INDEPENDENT STUDY

CE

INDIVIDUALIZED INSTRUCTION	MARKETING
INDUSTRIAL ARTS	MEETINGS
INDUSTRIAL ARTS EDUCATION	MENTAL HEALTH
INDUSTRIAL TRAINING	METAL WORKING
INDUSTRY	MEXICAN AMERICANS
INPLANT PROGRAMS	MIDDLE AGED ADULTS
INSERVICE EDUCATION	MIDLIFE TRANSITIONS
INSERVICE TEACHER EDUCATION	MIGRANT ADULT EDUCATION
INSTITUTES (TRAINING PROGRAMS)	MIGRANT EMPLOYMENT
INSTRUCTIONAL INNOVATION	MILITARY TRAINING
INTEGRATED CURRICULUM	MINORITY GROUPS
INTERESTS	NEEDS ASSESSMENT
INTERPERSONAL COMPETENCE	NONCREDIT COURSES
INTERPERSONAL RELATIONSHIP	NONFORMAL EDUCATION
JOB ANALYSIS	NONTRADITIONAL EDUCATION
JCB DEVELOPMENT	NONTRADITIONAL OCCUPATIONS
JOB LAYOFF	NONTRADITIONAL STUDENTS
JCB PERFORMANCE	NUCLEAR POWER PLANT
JOB PLACEMENT	TECHNICIANS
JOB SATISFACTION	NURSE PRACTITIONERS
JOB SEARCH METHODS	NURSES
JCB SHARING	NURSES AIDS
JOB SKILLS	NURSING
JCB TRAINING	NURSING EDUCATION
KNOWLEDGE LEVEL	NUTRITION INSTRUCTION
LABCF ECONOMICS	OCCUPATIONAL ASPIRATION
LABCF EDUCATION	OCCUPATIONAL CLUSTERS
LABCF FORCE	OCCUPATIONAL HOME ECONOMICS
LABCF FORCE DEVELOPMENT	OCCUPATIONAL INFORMATION
LABCF LEADERSHIP TRAINING	OCCUPATIONAL MOBILITY
LABCF MARKET	OCCUPATIONAL SAFETY & HEALTH
LABCF RELATIONS	OCCUPATIONAL SURVEYS
LABCR SUPPLY	OCCUPATIONS
LAUNDRY DRYCLEANING	OFF THE JOB TRAINING
OCCUPATIONS	OFFICE MACHINES
LAW ENFORCEMENT	OFFICE OCCUPATIONS EDUCATION
LEADERSHIP STYLES	OFFICE PRACTICE
LEADERSHIP TRAINING	OFFICER PERSONNEL
LEARNING LABORATORIES	OLDER ADULTS
LEARNING MOTIVATION	ON THE JOB TRAINING
LECTURE METHOD	ORGANIZATIONAL DEVELOPMENT
LEISURE TIME	ORNAMENTAL HORTICULTURE
LIFELONG LEARNING	OUTCOMES OF EDUCATION
LITERACY	OUTREACH PROGRAMS
LITERACY EDUCATION	PARAPROFESSIONAL PERSONNEL
LITERACY GENRES	PARENT ATTITUDES
MACHINE REPAIRERS	PARENT EDUCATION
MACHINE TOOL OPERATORS	PARENT INVOLVEMENT
MALES	PARENTHOOD EDUCATION
MANAGEMENT DEVELOPMENT	PARENTS
MANUFACTURING INDUSTRY	PART TIME EMPLOYMENT
MARITAL STATUS	PART TIME STUDENTS

PARTICIPANT CHARACTERISTICS	SENSITIVITY TRAINING
PARTICIPANT SATISFACTION	SERVICE OCCUPATIONS
PARTICIPATION	SEX DISCRIMINATION
PATIENT EDUCATION	SEX ROLE
PERSONNEL EVALUATION	SHELTERED WORKSHOPS
PERSONNEL POLICY	SHORTHAND
PHYSICIANS	SKILLED OCCUPATIONS
POLICE	SMALL BUSINESS
POLICE COMMUNITY RELATIONSHIP	SOCIAL CHANGE
POLICE EDUCATION	SOCIAL PROBLEMS
POSTSECONDARY EDUCATION	SOCIAL SYSTEMS
PRACTICAL NURSING	SOCIAL WORKERS
PRERETIREMENT EDUCATION	SPECIAL DEGREE PROGRAMS
PROFESSIONAL EDUCATION	STAFF DEVELOPMENT
PRODUCTIVITY	STATE AGENCIES
PROFESSIONAL ASSOCIATIONS	STATE STANDARDS
PROFESSIONAL CONTINUING EDUCATION	STATE SURVEYS
PROFESSIONAL PERSONNEL	STUDENT NEEDS
PROFESSIONAL TRAINING	SUBCULTURES
PROGRAM ADMINISTRATION	SUPERVISED FARM PRACTICE
PROGRAM CONTENT	SUPERVISORS
PROGRAM DEVELOPMENT	SUPERVISORY TRAINING
PROGRAM EVALUATION	SURVEYS
PROMOTION (OCCUPATIONAL)	TEACHING METHODS
PRIVATE SCHOOLS	TECHNICAL EDUCATION
PSYCHOLOGICAL NEEDS	TECHNICAL INSTITUTES
PUBLIC AFFAIRS EDUCATION	TECHNICAL OCCUPATIONS
PUBLIC SCHOOL ADULT EDUCATION	TECHNOLOGICAL ADVANCEMENT
QUALITY CONTROL	TECHNOLOGICAL LITERACY
QUALITY OF LIFE	TESTING
READING INSTRUCTION	TEXTBOOK EVALUATION
REENTRY STUDENTS	TRADE AND INDUSTRIAL EDUCATION
REENTRY WORKERS	TRAINED
REMEDIAL INSTRUCTION	TRAINERS
RESEARCH COORDINATING UNITS	TRAINING
RESIDENTIAL PROGRAMS	TRAINING METHODS
RESCUE CENTERS	TYPEWRITING
RETIREMENT	UNEMPLOYMENT
RETIREMENT BENEFITS	UNSKILLED OCCUPATIONS
RETAINING	URBAN AREAS
ROLE CONFLICT	JOB EXTENSION
ROLE PERCEPTION	VETERANS
RURAL DEVELOPMENT	VETERANS EDUCATION
RURAL EXTENSION	VOCATIONAL ADJUSTMENT
SAFETY EDUCATION	VOCATIONAL ATTITUDE
SALES OCCUPATIONS	VOCATIONAL EDUCATION
SCHOOL BUSINESS RELATIONSHIP	VOCATIONAL EDUCATION TEACHERS
SECOND LANGUAGE LEARNING	VOCATIONAL EVALUATION
SECRETARIES	VOCATIONAL FOLLOWUP
SEMINARS	VOCATIONAL INTERESTS
SEMISKILLED OCCUPATIONS	VOCATIONAL MATURITY

CE

VOCATIONAL REHABILITATION
VOCATIONAL SCHOOLS
VOCATIONAL TRAINING CENTERS
VOLUNTEER AGENCIES
VOLUNTEER TRAINING
VOLUNTEERS
WEEKEND PROGRAMS
WELFARE RECIPIENTS
WHITE COLLAR OCCUPATIONS
WOODWORKING
WORD PROCESSING
WORK ATTITUDES
WORK ENVIRONMENT
WORK EXPERIENCE
WORK EXPERIENCE PROGRAMS
WORK STUDY PROGRAMS
WORKING HOURS
WORKSHOES
YOUNG ADULTS
YOUTH CLUES
YOUTH EMPLOYMENT
YOUTH OPPORTUNITIES
YOUTH PROGRAMS

COUNSELING AND PERSONNEL SERVICES (CG)

Scope of Interest:

Preparation, practice, supervision, and evaluation of counselors, student affairs personnel, and other helping specialists at all educational levels and in all settings. Includes counseling and guidance services available in educational, occupational, rehabilitation, business/industry, and community settings; human characteristics; theoretical developments in counseling and guidance; group work; testing and test analysis as they relate to guidance functions; guidance program development, implementation, and evaluation; and research and program development in futurism and planned change.

Specific topics include helping services in the following areas: educational, career, and life planning; consultation with students, families, and other professional educators; aging, grief, and dying; mid-life career change; elimination of sexual stereotyping; dropout identification, prevention, and rehabilitation; drug education; sex education; family living, divorce, and separation; and counseling with special population groups, such as older adults, adolescent parents, institutionalized persons, women, minorities, handicapped persons, veterans, runaways, unemployed school youth, drug abusers, and juvenile delinquents; certification, licensure, and other legal matters relating to the field of counseling and guidance.

Notes:

Learning theory, the psychology of learning, and the measurement of cognitive functioning are of interest insofar as they must be understood and applied in a counseling and guidance context. Psychological testing is similarly of interest, but overlaps heavily with the TM Clearinghouse. Practice has been to direct documents containing actual testing instruments (or which are strongly oriented toward mathematical analysis of tests) to the TM Clearinghouse. Application of computer technology to guidance and counseling will be input by CG; other technologically oriented documents will be directed to the IR Clearinghouse. Includes career guidance and counseling, but not career assessment instruments and career education program evaluation instruments (covered by TM).

Brief Statement:

Preparation, practice, and supervision of counselors at all educational levels and in all settings; theoretical development of counseling and guidance; personnel procedures such as testing and interviewing, and the analysis and dissemination of the resultant information; group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

CG APPLICABLE TERMS

ABORTIONS	COLLEGE BOUND STUDENTS
ACADEMIC ASPIRATION	COLLEGE CHOICE
ACHIEVEMENT NEED	COLLEGE ENVIRONMENT
ADJUSTMENT (TO ENVIRONMENT)	COMMUNICATION APPREHENSION
ADJUSTMENT COUNSELORS	CONFIDENTIAL RECORDS
ADOLESCENT DEVELOPMENT	CONFIDENTIALITY
ADOLESCENTS	CONFLICT RESOLUTION
ADULT COUNSELING	CONGRUENCE (PSYCHOLOGY)
ADULT DEVELOPMENT	CONSULTANTS
AFFECTION	CONTRACEPTION
AFFECTIVE BEHAVIOR	COPING
AGE DIFFERENCES	CORRECTIONAL INSTITUTIONS
AGE DISCRIMINATION	CORRECTIONAL REHABILITATION
AGGRESSION	COUNSELING
AGING (INDIVIDUALS)	COUNSELING EFFECTIVENESS
ALCOHOL EDUCATION	COUNSELING OBJECTIVES
ALCOHOLISM	COUNSELING SERVICES
ALIENATION	COUNSELING TECHNIQUES
ANDROGYNY	COUNSELING THEORIES
ANXIETY	COUNSELOR ATTITUDES
APATHY	COUNSELOR CERTIFICATION
ATTITUDE CHANGE	COUNSELOR CHARACTERISTICS
BATTERED WOMEN	COUNSELOR CLIENT RATIO
BEHAVIOR CHANGE	COUNSELOR CLIENT RELATIONSHIP
BEHAVIOR MODIFICATION	COUNSELOR EDUCATORS
BEHAVIOR PATTERNS	COUNSELOR EVALUATION
BEHAVIOR PROBLEMS	COUNSELOR PERFORMANCE
BEHAVIOR THEORIES	COUNSELOR QUALIFICATIONS
BIBLIOTHERAPY	COUNSELOR ROLE
BIOFEEDBACK	COUNSELOR SELECTION
BLACK INFLUENCES	COUNSELOR TEACHER COOPERATION
BLACK POWER	COUNSELOR TRAINING
BLACK STEREOTYPES	COUNSELORS
BODY IMAGE	CRIME
BURNOUT	CRIME PREVENTION
CAREER AWARENESS	CRIMINALS
CAREER CHANGE	CRISIS INTERVENTION
CAREER CHOICE	CROSS CULTURAL STUDIES
CAREER COUNSELING	DANCE THERAPY
CAREER DEVELOPMENT	DEATH
CAREER EXPLORATION	DELINQUENCY
CAREER GUIDANCE	DELINQUENCY CAUSES
CAREER PLANNING	DELINQUENCY PREVENTION
CHANGE AGENTS	DELINQUENT BEHAVIOR
CHANGE STRATEGIES	DELINQUENT REHABILITATION
CHILD ABUSE	DEPRESSION (PSYCHOLOGY)
CHILD NEGLECT	DESENSITIZATION
CIVIL RIGHTS	DISCLOSURE
CLASSROOM ENVIRONMENT	DISPLACED HOMEMAKERS
CLINICAL PSYCHOLOGY	DIVORCE
CO-COUNSELING	DRINKING
COGNITIVE STYLE	DROPOUT ATTITUDES

DROFCUT CHARACTERISTICS	HIGH RISK STUDENTS
DROFCUT PREVENTION	HOSTILITY
DROFCUT PRGGRAMS	HUMAN RELATIONS
DROFCUTS	HUMAN SERVICES
DRUG ABUSE	IDENTIFICATION (PSYCHOLOGY)
DRUG ADDICTION	ILLEGAL DRUG USE
DRUG EDUCATION	INDIVIDUAL CHARACTERISTICS
DRUG REHABILITATION	INDIVIDUAL COUNSELING
DRUG THERAPY	INDIVIDUAL NEEDS
DRUG USE	INDIVIDUAL POWER
DUAL CAREER FAMILY	INDIVIDUAL PSYCHOLOGY
EARLY PARENTHOOD	INTERACTION
EGOCENTRISM	INTERMARRIAGE
EMOTIONAL ADJUSTMENT	INTERPERSONAL ATTRACTION
EMOTIONAL DEVELOPMENT	INTERPERSONAL COMMUNICATION
EMOTIONAL DISTURBANCES	INTERPERSONAL COMPETENCE
EMOTIONAL EXPERIENCE	INTERPERSONAL RELATIONSHIP
EMOTIONAL PROBLEMS	INTERVIEWS
EMOTIONAL RESPONSE	JOB APPLICANTS
EMPATHY	JOB APPLICATION
EMPLOYED PARENTS	JOB PERFORMANCE
EMPLOYED WOMEN	JOB PLACEMENT
EMPLOYMENT COUNSELORS	JOB SATISFACTION
EMPLOYMENT POTENTIAL	JOB SEARCH METHODS
EQUAL EDUCATION	JUVENILE COURTS
EQUAL OPPORTUNITIES (JOBS)	JUVENILE GANGS
EQUAL PROTECTION	LEADERSHIP
ETHNIC STEREOTYPES	LEADERSHIP QUALITIES
ETHNICITY	LEADERSHIP RESPONSIBILITY
ETHNOCENTRISM	LEADERSHIP STYLES
FAMILY ATTITUDES	LEADERSHIP TRAINING
FAMILY COUNSELING	LIFE SATISFACTION
FAMILY STRUCTURE	LIFE STYLE
FEAR OF SUCCESS	LOCUS OF CONTROL
FEMALES	LONELINESS
FEMINISM	MARIJUANA
FUTURES (OF SOCIETY)	MARITAL INSTABILITY
GERIATRICS	MEMORY
GERONTOLOGY	MENTAL HEALTH
GRIEF	METACOGNITION
GROUP COUNSELING	MICROCOUNSELING
GROUP DYNAMICS	MODELING (PSYCHOLOGY)
GROUP GUIDANCE	MORAL DEVELOPMENT
GROUP THERAPY	MORAL VALUES
GUIDANCE	MORALE
GUIDANCE CENTERS	MOTIVATION
GUIDANCE OBJECTIVES	NEEDS
GUIDANCE PERSONNEL	NEEDS ASSESSMENT
GUIDANCE PROGRAMS	NEGATIVE REINFORCEMENT
HELPING RELATIONSHIPS	NEUROSIS
HELPLESSNESS	NONCOLLEGE BOUND STUDENTS
HIGH RISK PERSONS	NONDIRECTIVE COUNSELING

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NONTRADITIONAL OCCUPATIONS
NONTRADITIONAL STUDENTS
NUCLEAR FAMILY
NUTRITION
OBESITY
OCCUPATIONAL ASPIRATION
OCLOCATIONAL INFORMATION
OLDER ADULTS
OVERACHIEVEMENT
OVERCOMING
PARANOID BEHAVIOR
PARENT ASPIRATION
PARENT CHILD RELATIONSHIP
PARENT COUNSELING
PARENT INFLUENCE
PARENT RESPONSIBILITY
PARENT ROLE
PEER ACCEPTANCE
PEER COUNSELING
PEER EVALUATION
PEER GROUPS
PEER INFLUENCE
PEER RELATIONSHIP
PERSONALITY
PERSONALITY ASSESSMENT
PERSONALITY CHANGE
PERSONALITY DEVELOPMENT
PERSONALITY PROBLEMS
PERSONALITY STUDIES
PERSONALITY TRAITS
PERSONNEL SELECTION
PERSPECTIVE TAKING
PLACEMENT
PLAY THERAPY
POSITIVE REINFORCEMENT
PRACTICUM SUPERVISION
PRACTICUMS
PREGNANT STUDENTS
PRERETIREMENT EDUCATION
PREVENTION
PRISONERS
PROBLEM CHILDREN
PROJECTIVE MEASURES
PROSOCIAL BEHAVIOR
PSYCHIATRY
PSYCHOLOGICAL CHARACTERISTICS
PSYCHOLOGICAL EVALUATION
PSYCHOLOGICAL NEEDS
PSYCHOLOGICAL PRACTICES
PSYCHOLOGICAL SERVICES
PSYCHOLOGICAL STUDIES
PSYCHOLOGY
PSYCHOSIS
PSYCHOTHERAPY
PUPIL PERSONNEL SERVICES
PUPIL PERSONNEL WORKERS
QUALITY OF LIFE
RACIAL ATTITUDES
RACIAL BIAS
RACIAL DIFFERENCES
RACIAL DISCRIMINATION
RACIAL FACTORS
RAPE
RAPPORT
RATIONAL EMOTIVE THERAPY
RECALL (PSYCHOLOGY)
RECIDIVISM
RECOGNITION (PSYCHOLOGY)
REHABILITATION COUNSELING
REINFORCEMENT
REJECTION (PSYCHOLOGY)
RELAXATION TRAINING
REMARKABLE
RESIDENT ASSISTANTS
RETENTION (PSYCHOLOGY)
RETIREMENT
ROLE CONFLICT
ROLE PERCEPTION
ROLE PLAYING
ROLE THEORY
RUNAWAYS
SCHOOL COUNSELING
SCHOOL COUNSELORS
SCHOOL GUIDANCE
SCHOOL PSYCHOLOGISTS
SCHOOL SOCIAL WORKERS
SELF ACTUALIZATION
SELF CONCEPT
SELF CONGRUENCE
SELF CONTROL
SELF ESTEEM
SELF EVALUATION (INDIVIDUALS)
SENSITIVITY TRAINING
SEX BIAS
SEX DIFFERENCES
SEX DISCRIMINATION
SEX FAIRNESS
SEX ROLE
SEX STEREOTYPES
SEXUALITY
SIBLINGS
SIGNIFICANT OTHERS
SMOKING
SOCIAL ADJUSTMENT

SOCIAL SERVICE
SOCIAL BIAS
SOCIAL COGNITION
SOCIAL EXCHANGE THEORY
SOCIAL ISCIATION
SOCIAL PSYCHOLOGY
SOCIAL SUPPORT GROUPS
SOCIAL WORKERS
SOCIALIZATION
SEOUSES
STATUS NEED
STRESS VARIABLES
STUDENT ADJUSTMENT
STUDENT ALIENATION
STUDENT PERSONNEL SERVICES
STUDENT PERSONNEL WORKERS
STUDENT RIGHTS
STUDENT WELFARE
SUICIDE
TEACHER ALIENATION
TEACHER BURNOUT
THERAPEUTIC ENVIRONMENT
THERAPEUTIC RECREATION
TRANSACTIONAL ANALYSIS
TRANSCENDENTAL MEDITATION
VALUE JUDGEMENT
VALUES
VALUES CLASSIFICATION
VICTIMS OF CRIME
VIOLENCE
VOCATIONAL INTERESTS
VOCATIONAL REHABILITATION
WIDOWED
WITHDRAWAL (PSYCHOLOGY)
WOMENS STUDIES
YOUTH PROBLEMS

READING AND COMMUNICATION SKILLS (CS)

Scope of Interest

All aspects of communication skills in English as a first language—reading, writing, speaking, and listening—how they are interrelated, and how they are taught, pre-school through adult. Includes:

Reading—The nature of reading and how it is taught, including research on psycholinguistic and sociolinguistic aspects of reading, cognitive and linguistic development in reading, reading instruction methods and materials, clinical and remedial strategies for overcoming reading problems, and the application of reading skills to subject-matter learning, functional reading or literacy, and reading for enjoyment.

Writing—Development of and instruction in writing abilities, including research on the nature of these abilities and their acquisition. Includes the literature on writing as composing and revising processes: pre-writing activities, drafting, revising, editing, and producing final copy; literature on the nature of and instruction in creative writing; literature on the acquisition and remediation of functional writing skills and on writing as an aspect of literacy.

Speaking and Listening—Development of and instruction in speaking and listening abilities, including interaction in social, instructional, public, and organizational settings. Includes interpersonal and small group communication, speech sciences, communication development, public address skills, theater, oral interpretation, and communication education.

Mass Communication—Journalist education, educational applications of electronic media, teaching and learning consumer-oriented skills for using print and non-print media, production of broadcasts, films, and multi-media for development of creativity in educational settings.

Brief Statement

Reading, English, and communication skills (verbal and nonverbal), pre-school through college; educational research and instruction development in reading, writing, speaking, and listening; identification, diagnosis, and remediation of reading problems; speech communication (including forensics), mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching; instructional materials, curricula, tests/measurement, and methodology at all levels of reading; the role of libraries and other agencies in fostering and guiding reading; diagnostic and remedial reading services in schools and clinical settings. Preparation of reading teachers and specialists.

CS APPLICABLE TERMS

ACADEMIC ACHIEVEMENT (READING)
ACTING
ADOLESCENT LITERATURE
ADULT READING PROGRAMS
ADVERTISING
AMERICAN LITERATURE
ATTITUDES (AS RELATED TO SPEECH)
ATTITUDES TOWARD READING
AUDIOVISUAL AIDS (RE: TEACHING COMMUNICATION SKILLS)
AUDITORY DISCRIMINATION
AUDITORY PERCEPTION
EASIC READING
EASIC SKILLS (READING, WRITING, SPEAKING)
BEGINNING READING
BILINGUALISM (RE: TESOL)
BIOGRAPHIES
BLACK DIALECTS
BLACK LITERATURE
BRAINSTOPMING
CENSORSHIP
CEREBRAL BALANCE
CHARACTER RECOGNITION
CHILD LANGUAGE
CHILDREN'S BOOKS
CHILDREN'S LITERATURE
CHOICE SPEAKING
CLIQUE PROCEDURE
COGNITIVE DEVELOPMENT
COGNITIVE PROCESSES
COLOR
COMMUNICATION (THOUGHT TRANSFER IN INTERPERSONAL COMMUNICATION)
COMMUNICATION RESEARCH
COMMUNICATION, VERBAL
COMPENSATORY READING
INSTRUCTION
COMPOSITION
COMPOSITION (LITERARY)
COMPOSITION SKILLS (LITERARY)
COMPREHENSION
CONTENT READING
CONTEXT CLUES
CREATIVE DRAMATICS
CREATIVE THINKING
CREATIVE WRITING
CRITICAL READING
CRITICAL THINKING
CULTURALLY DISADVANTAGED (e.g.:

TENL)
CURRICULUM DESIGN (LANGUAGE)
CURRICULUM DEVELOPMENT (LANGUAGE)
CURRICULUM EVALUATION (LANGUAGE)
CURRICULUM GUIDES (ENGLISH LANGUAGE)
DEBATE
DECODING (READING)
DEEP STRUCTURE (ENGLISH)
DESCRIPTIVE WRITING
DEVELOPMENTAL READINGS
DIAGNOSTIC TEACHING
DIALECT STUDIES (COMMUNICATION)
DIALECTS (RE: TEACHING ENGLISH AND READING)
DIRECTED READING ACTIVITY
DISCOURSE ANALYSIS
DISCRIMINATION LEARNING
DISCUSSION GROUPS (SPEECH)
DRAMA/DRAMATICS
DYSLEXIA
EARLY READING
ELECTIVE READING
EMPLOYER EMPLOYEE RELATIONSHIP (COMMUNICATION)
ENGLISH
ENGLISH CURRICULUM (ALL LEVELS)
ENGLISH LITERATURE
ENGLISH MAJOR
ENGLISH PROGRAMS
ENGLISH SKILLS
ENGLISH TEACHER PREPARATION
ENGLISH-EDUCATION INSTRUCTION
ERROR PATTERNS
ETHNIC LITERATURE
EVALUATION (ENGLISH, READING, AND SPEECH)
EXPOSITORY WRITING
EYE FIXATIONS
EYE MOVEMENTS (READING)
FICTION
FILE PRODUCTION
FILM STUDY
FILMS (COMMUNICATION)
FOLKLORE BOOKS
FUNCTIONAL LITERACY
GRAMMAR
GRAPHEMES

GROUP DYNAMICS (COMMUNICATION)	LANGUAGE ABILITY
GROUP READING	LANGUAGE ARTS
GROUP RELATIONS	LANGUAGE DEVELOPMENT
GROUP STRUCTURE (COMMUNICATION)	LANGUAGE EXPERIENCE APPROACH
GROUPING (INSTRUCTIONAL PURPOSES)	LANGUAGE HANDICAPS
HANDWRITING SKILLS	LANGUAGE INSTRUCTION
EARING	LANGUAGE PATTERNS (ENGLISH)
HIGH INTEREST LOW VOCABULARY BOOKS	LANGUAGE PROGRAMS (ENGLISH)
HUMAN RELATIONS (COMMUNICATION)	LANGUAGE RESEARCH
HUMANITIES (LITERATURE AND COMMUNICATION)	LANGUAGE SKILLS (ENGLISH)
HUMANITIES INSTRUCTION (LITERATURE AND COMMUNICATION)	LANGUAGE STANDARDIZATION
INDEPENDENT READING	LANGUAGE STYLES
INDIVIDUAL DEVELOPMENT (COMMUNICATIONS)	LANGUAGE TESTS (ENGLISH)
INDIVIDUAL POWER (SPEECH)	LANGUAGE USAGE (ENGLISH)
INDIVIDUAL READING	LATERAL DOMINANCE
INDIVIDUALIZED READING	LEADERSHIP (SPEECH)
INFORMAL READING INVENTORY	LEARNING DIFFICULTIES
INFORMATION NETWORKS (COMMUNICATION)	LEARNING DISABILITIES
INITIAL TEACHING ALPHABET	LEARNING PROCESSES
INNER SPEECH (SUBVOCAL)	LEARNING THEORIES
INSERVICE TEACHER EDUCATION (READING AND COMMUNICATION)	LETTERS (ALPHABET)
INSTRUCTIONAL IMPROVEMENT	LEXICOLOGY
INSTRUCTIONAL INNOVATION (COMMUNICATION)	LINGUISTIC COMPETENCE
INSTRUCTIONAL MATERIALS (COMMUNICATION)	LINGUISTIC PERFORMANCE
INTEGRATED ACTIVITIES	LINGUISTIC THEORY
INTERACTION (SPEECH)	LISTENING
INTERACTION PROCESS ANALYSIS (SPEECH)	LISTENING COMPREHENSION
INTERCOMMUNICATION	LISTENING SKILLS
INTERCULTURAL COMMUNICATION	LITERACY
INTERDISCIPLINARY APPROACH	LITERACY EDUCATION
INTERPERSONAL COMPETENCE	LITERACY ANALYSIS
INTERPERSONAL RELATIONSHIP (COMMUNICATION)	LITERACY COMPOSITIONS
INTERPRETIVE READING	LITERACY CONVENTIONS
INTRODUCTORY COMPOSITION	LITERACY CRITICISM
JOURNALISM	LITERACY HISTORY
KINESTHETIC METHODS	LITERACY STYLES
KINESTHETIC PERCEPTION	LITERATURE
LANGUAGE	LITERATURE APPRECIATION
	LITERATURE GUIDES
	LITERATURE PROGRAMS
	LITERATURE REVIEWS
	LOGIC (SPEECH COMMUNICATION)
	MANAGEMENT SYSTEMS (COMMUNICATION)
	MASS MEDIA (COMMUNICATION)
	MEMORY
	MISCUER ANALYSIS
	MOTIVATION TECHNIQUES (COMMUNICATION)
	SIMULTANEOUS INSTRUCTION (COMMUNICATION)-
	SWERATION (COMMUNICATION)

NEWSPAPERS	READING DEVELOPMENT
NONSTANDARD DIALECTS	READING DIAGNOSIS
NONVERBAL COMMUNICATION	READING DIFFICULTY
OPEN ENVIRONMENT	READING FAILURE
ORGANIZATIONAL RESEARCH (COMMUNICATION)	READING GAMES
ORAL COMMUNICATION	READING HABITS
ORAL ENGLISH	READING IMPROVEMENT
ORAL EXPRESSION	READING INSTRUCTION
ORAL READING	READING INTERESTS
ORGANIZATIONAL CLIMATE (COMMUNICATION)	READING LEVEL
ORGANIZATIONAL COMMUNICATION	READING MATERIAL SELECTION
PACING	READING MATERIALS
PAPERBACK BOOKS	READING PROCESSES
PATTERN RECOGNITION	READING PROGRAMS
PERCEPTION	READING READINESS
PERCEPTUAL DEVELOPMENT	READING READINESS TESTS
PERCEPTUAL MOTION COORDINATION	READING RESEARCH
PERSONAL RELATIONSHIP (COMMUNICATION)	READING SKILLS
PERSONNEL INTEGRATION	READING SPEED
PERSUASIVE DISCOURSE	READING TEACHERS
PHONEME GRAPHEME CONFIENCE	READING TESTS
PHONEMES	RECEPTIVE LANGUAGE (COMMUNICATION)
PHONEMIC ALPHABETS	RECREATIONAL READING
PHONICS	REGIONAL DIALECTS
PHYSIOLOGY OF READING	REMEDIAL READING
FICTITIOUS STIMULI	REMEDIAL READING CLINICS
POETRY	REMEDIAL READING PROGRAMS
PROSE	REMEDIAL READING SERVICES
PROSE LEARNING	RESEARCH ON READING
PSYCHOLINGUISTICS	RETARDED READERS
PSYCHOLGY OF READING	RHETORIC
PUBLIC RELATIONS	ROLE PERCEPTION (COMMUNICATION)
PUBLIC SPEAKING	SEMANTICS
PUPPETRY (INTERPRETATION OF CHILDREN'S LITERATURE)	SENSORY INTEGRATION (LANGUAGE)
RAPID READING	SENTENCE COMBINING
REPORT (COMMUNICATION)	SEQUENTIAL READING PROGRAMS
READABILITY	SIGHT METHOD
READINESS	SIGHT VOCABULARY
READING	SILENT READING
READING (ENGLISH INSTRUCTION)	SOCIAL DIALECTS
READING ABILITY	SOCIAL INFLUENCES (SPEECH)
READING ACHIEVEMENT	SOCIOLINGUISTICS
READING BEHAVIOR	SOCIOLOGY OF READING
READING CENTERS	SPEAKING
READING CLINICS	SPEECH
READING COMPREHENSION	SPEECH COMMUNICATION
READING CONSULTANTS	SPEECH CURRICULUM
	SPEECH EDUCATION
	SPEECH INSTRUCTION
	SPEECH SKILLS

SPEED READING
SPELLING
STANDARD SPOKEN USAGE
STORY READING
STORY TELLING
STRUCTURAL ANALYSIS
STRUCTURAL GRAMMAR
STUDY SKILLS
SUPPLEMENTARY READING
MATERIALS
SYNTAX
SYSTEMS APPROACH
(COMMUNICATION)
TEACHER EDUCATION (ENGLISH,
READING, AND SPEECH)
TEACHING METHODS (ENGLISH,
READING, AND SPEECH)
TEACHING OF ENGLISH
TEACHING READING
TELEVISION
TEXTBOOKS
THEATER ARTS
TRADITIONAL GRAMMAR
TRANSFORMATIONAL GENERATIVE
GRAMMAR
TUTORIAL PROGRAMS (ENGLISH AND
READING)
VERBAL COMMUNICATION
VERBAL DEVELOPMENT
VISUAL DISCRIMINATION
VISUAL LITERACY
VISUAL PERCEPTION
VOCABULARY
VOCABULARY DEVELOPMENT
WORD RECOGNITION
WORK STUDY SKILLS
WORLD LITERATURE
WRITING
WRITING EXERCISES
WRITING SKILLS
WRITTEN LANGUAGE

EDUCATIONAL MANAGEMENT (EA)

Scope of Interest

Educational management, including all aspects of the administration, governance, and structure of public and private educational organizations at the elementary and secondary levels and including the provision of facilities for their operation, as well as the theory and practice of administration and governance generated from the fields of educational, public, and business administration and from the humanities and the social and behavioral sciences. Topics covered include: the social, technological, political, and legal contexts of educational organizations, and of State and Federal programs and policies; methods and varieties of structure, including various grade organizations, traditional and alternative schools, and rescheduled school year plans; the tasks and processes of administration, encompassing policy development and long-range planning, finance, business management, law, public relations, staff personnel administration (e.g., collective bargaining, evaluation, affirmative action), pupil personnel administration conflict management, curriculum development, computer applications and quantitative methods; the physical environment, including facility planning design, construction, equipment and furnishings, and maintenance; preservice and inservice preparation of administrators.

Notes

The topic of teacher evaluation is generally handled by EA, if the implications are related to administrative functions, programs, and/or personnel. Teacher evaluation documents that concern teacher attitudes or effects on teacher preparation are handled by SP.

Brief Statement

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators; tasks and processes of administration; methods and varieties of organization and organizational change; and the social context of educational organizations.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

EA APPLICABLE TERMS

ADMINISTRATION
ADMINISTRATIVE AGENCIES
ADMINISTRATIVE CHANGES
ADMINISTRATIVE ORGANIZATION
ADMINISTRATIVE PERSONNEL
ADMINISTRATIVE POLICY
ADMINISTRATIVE PRINCIPLES
ADMINISTRATIVE PROBLEMS
ADMINISTRATOR ATTITUDES
ADMINISTRATOR BACKGROUND
ADMINISTRATOR CHARACTERISTICS
ADMINISTRATOR EDUCATION
ADMINISTRATOR EVALUATION
ADMINISTRATOR GUIDES
ADMINISTRATOR QUALIFICATIONS
ADMINISTRATOR RESPONSIBILITY
ADMINISTRATOR ROLE
ADMINISTRATOR SELECTION
ADMINISTRATORS
ADMISSIONS
ADVISORY COMMITTEES
AIR CONDITIONING
AIR INFLATED STRUCTURES
AIR SUPPORT STRUCTURES
ALARM SYSTEMS
ALTERNATIVE SCHOOLS
ALTERNATIVES TO SUSPENSION
ANNOUNCED
ANNUAL REPORTS
ARCHITECTS
ARCHITECTURAL CHARACTER
ASSISTANT SUPERINTENDENT ROLE
ATTENDANCE OFFICERS
ATTENDANCE RECORDS
AUTHORITARIANISM
AVERAGE DAILY ATTENDANCE
BACK-TO-BASICS MOVEMENT
BOARD ADMINISTRATOR
RELATIONSHIP
BOARD OF EDUCATION POLICY/ROLE
BOND ISSUES
BUDGETS/BUDGETTING
BUILDING DESIGN
BUILDING EQUIPMENT
BUILDING IMPROVEMENT
BUILDING INNOVATION
BUILDING MATERIALS
BUILDING OBSCURITY
BUILDING OPERATION
BUILDING PLANS
BUILDING REINVENTION
BUREAUCRACY

BUS TRANSPORTATION
BUSING (FOR DESEGREGATION)
CAPITAL OUTLAY (FOR FIXED
ASSETS)
CHANGE AGENTS
CHANGE STRATEGIES
CHIEF ADMINISTRATORS
CITIZEN PARTICIPATION
CITIZENS COUNCILS
CIVIL LIBERTIES
CIVIL RIGHTS
CIVIL RIGHTS LEGISLATION
CLASSROOM DESIGN
CLASSROOM FURNITURE
CLIMATE CONTROL
COLLECTIVE BARGAINING
COMMUNICATION SKILLS
COMMUNITY ATTITUDES
COMMUNITY EDUCATION
COMMUNITY INVOLVEMENT
COMMUNITY ORGANIZATIONS
COMMUNITY ROLE
COMMUNITY SCHOOL DIRECTORS
COMMUNITY SURVEYS
COMPETENCY (PERFORMANCE) BASED
EDUCATION
CONCEPTUAL SCHEMES
CONFIDENTIALITY
CONFLICT
CONFLICT MANAGEMENT
CONFLICT RESOLUTION
CONSTITUTIONAL LAW
CONSTRUCTION (EDUCATIONAL
FACILITIES)
CONSTRUCTION COSTS
CONSTRUCTION MANAGEMENT
CONTINUOUS PROGRESS PLAN
(UNGRADED SCHOOL)
CONTRACTS
CONTROLLED ENVIRONMENT
CORPORAL PUNISHMENT
COURT CASES
COURT LITIGATION
CURRICULUM DESIGN
CURRICULUM DEVELOPMENT
CURRICULUM PLANNING
DECENTRALIZATION
DECISION MAKING
DECLINING ENROLLMENT
DEGREES
DEMOCRATIC VALUES
DEMOGRAPHY

DIFFERENTIATE STAFFS	FACILITY GUIDELINES
DINING FACILITIES	FACILITY IMPROVEMENT
DISCIPLINE	FACILITY INVENTORY
DISCIPLINE POLICY	FACILITY REQUIREMENTS
DISCIPLINE PROBLEMS	FACILITY UTILIZATION RESEARCH
DISCRIMINATORY LEGISLATION	FAST TRACK SCHEDULING
DRESS CODES	FEDERAL AID
DRUG LEGISLATION	FEDERAL COURT LITIGATION
DUE PROCESS	FEDERAL GOVERNMENT
EDUCATION VOUCHERS	FEDERAL LEGISLATION
EDUCATIONAL ACCOUNTABILITY	FEDERAL PROGRAMS
EDUCATIONAL ADMINISTRATION	FEDERAL REGULATION
EDUCATIONAL ALTERNATIVES	FINANCE REFORM
EDUCATIONAL ASSESSMENT	FINANCIAL NEEDS
EDUCATIONAL CHANGE	FINANCIAL POLICY
EDUCATIONAL ECONOMICS	FINANCIAL PROBLEMS
EDUCATIONAL EQUALITY	FINANCIAL SUPPORT
EDUCATIONAL FACILITIES	FISCAL CAPACITY
EDUCATIONAL FINANCE	FLEXIBLE FACILITIES
EDUCATIONAL HISTORY	FLEXIBLE PROGRESSION
EDUCATIONAL IMPROVEMENT	FLEXIBLE SCHEDULING
EDUCATIONAL INNOVATION	FORMATIVE EVALUATION
EDUCATIONAL LEGISLATION	FOUND SPACES
EDUCATIONAL NEEDS	FULL STATE FUNDING
EDUCATIONAL OBJECTIVES	FUTURISM
EDUCATIONAL ORGANIZATIONS	GAME THEORY
EDUCATIONAL PARKS	GOVERNANCE
EDUCATIONAL PLANNING	GOVERNING BOARDS
EDUCATIONAL POLICY	GOVERNMENT EMPLOYEES
EDUCATIONAL PROBLEMS	GOVERNMENT ROLE
EDUCATIONAL PROGRAMS	GOVERNMENT SCHOOL RELATIONSHIP
EDUCATIONAL RESEARCH	GRIEVANCE PROCEDURES
EDUCATIONAL STANDARDS	GROUP DYNAMICS
EMPLOYER EMPLOYEE RELATIONSHIP	HIGH SCHOOL ORGANIZATION
EMPLOYMENT INFLUENCES	HORIZONTAL ORGANIZATION
EMPLOYMENT INTERVIEWS	HUMANIZATION
EMPLOYMENT PRACTICES	HYBRID AIR STRUCTURES
ENROLLMENT PROJECTIONS	INDIVIDUALIZED INSTRUCTION
ENROLLMENT RATE	INDUSTRIAL RELATIONS
EQUAL PROTECTION	INFORMATION DISSEMINATION
EQUALIZATION AID	INPUT OUTPUT ANALYSIS
EQUIPMENT UTILIZATION	INSTITUTIONAL ADMINISTRATION
EVALUATION CRITERIA	INSTITUTIONAL FACILITIES
EVALUATION METHODS	INSTITUTIONAL SELF STUDIES
EXPENDITURE PER STUDENT	INSURANCE
EXPENDITURES	INTEGRATION METHODS
EXPERIMENTAL PROGRAMS	INTERIOR DESIGN
EXPULSION	IMMEDIATE ADMINISTRATIVE UNITS
EXTENDED SCHOOL YEAR	JOB TENURE
FACILITIES PLANNING	LAW ENFORCEMENT
FACILITY CASE STUDIES	LEADERSHIP RESPONSIBILITY
FACILITY EXPANSION	

LEADERSHIP STYLES	POPULATION TRENDS
LEADERSHIP TRAINING	POWER STRUCTURE
LEGAL PROBLEMS	POLYGRAPHY
LEGAL RESPONSIBILITY	PREGNANT STUDENTS
LOCAL GOVERNMENT	PRINCIPALS
MAINTENANCE	PRIVATE FINANCIAL SUPPORT
MANAGEMENT	PRIVATE SCHOOLS
MANAGEMENT BY OBJECTIVES	PROBLEM SOLVING
MANAGEMENT DEVELOPMENT	PROFESSIONAL PERSONNEL
MANAGEMENT INFORMATION SYSTEMS	PROGRAM ADMINISTRATION
MERCHANDISE INFORMATION	PROGRAM BUDGETING
MERIT PAY	PROGRAM COSTS
MIDDLE SCHOOLS	PROGRAM DESIGN
MOBILE CLASSROOMS	PROGRAM DEVELOPMENT
MODELS	PROGRAM EFFECTIVENESS
MODULAR BUILDING DESIGN	PROGRAM EVALUATION
MODULAR SCHEDULING	PROGRAM GUIDES
NATIONAL SURVEYS	PROGRAM IMPROVEMENT
NEEDS ASSESSMENT	PROGRAM PLANNING
NEGOTIATION AGREEMENTS	PROJECTIONS
NEGOTIATION IMPASSES	PROPERTY TAXES
NEIGHBORHOOD SCHOOL POLICY	PUBLIC OFFICIALS
NEIGHBORHOOD SCHOOLS	PUBLIC OPINION
NONGRADED SCHOOLS	PUBLIC RELATIONS
NONPUBLIC EDUCATION	PURCHASING
NONPUBLIC SCHOOL AID	PYRAMID ORGANIZATION
OCCUPATIONAL SURVEYS	QUARTER SYSTEM
OPEN PLAN SCHOOLS	REDUCTION IN FORCE
OPERATING EXPENSES	REGIONAL PLANNING
ORGANIZATION	REGIONAL SCHOOLS
ORGANIZATIONAL CHANGE	RELOCATABLE FACILITIES
ORGANIZATIONAL CLIMATE	RESEARCH
ORGANIZATIONAL COMMUNICATION	RESEARCH AND DEVELOPMENT
ORGANIZATIONAL DEVELOPMENT	CENTERS
ORGANIZATIONAL THEORIES	RESOURCE ALLOCATIONS
OUTDOOR LIGHTING	SALARIES
PARENT ATTITUDES	SCHEDULING
PARENT PARTICIPATION	SCHOOL ACCOUNTING
PARENT SCHOOL RELATIONSHIP	SCHOOL ADMINISTRATION
PARKING FACILITIES	SCHOOL BUDGET ELECTIONS
PAROCHIAL SCHOOL AID	SCHOOL BUILDINGS
PERFORMANCE CONTRACTS	SCHOOL BUSES
PERFORMANCE CRITERIA	SCHOOL CALENDARS
PERFORMANCE SPECIFICATIONS	SCHOOL CLOSING
PERSONNEL EVALUATION	SCHOOL COMMUNITY RELATIONSHIP
PERSONNEL MANAGEMENT	SCHOOL CONSTRUCTION
PERSONNEL POLICY	SCHOOL DESIGN
PNEUMATIC FORKS	SCHOOL DISTRICT AUTONOMY
POLICE SCHOOL RELATIONSHIP	SCHOOL DISTRICT SPENDING
POLICY FORMATION	SCHOOL DISTRICTS
POLITICAL INFLUENCES	SCHOOL EQUIPMENT -
POLITICAL POWER	SCHOOL EXPANSION

Ba

SCHOOL FUNDS	STUDENT TRANSPORTATION
SCHOOL IMPROVEMENT	SUMMATIVE EVALUATION
SCHOOL INTEGRATION	SUPERINTENDENT ROLE
SCHOOL LAW	SUPERINTENDENTS
SCHOOL MAINTENANCE	SUPERVISORS
SCHOOL ORGANIZATION	SUPERVISORY ACTIVITIES
SCHOOL PLANNING	SUPERVISORY METHODS
SCHOOL PLANT	SUPERVISORY TRAINING
SCHOOL POLICY	SUPREME COURT LITIGATION
SCHOOL PROPERTY	SURVEYS
SCHOOL REDISTRICTING	SUSPENSION
SCHOOL SCHEDULES	TABLES (DATA)
SCHOOL SECURITY	TAX ALLOCATION
SCHOOL SIZE	TAX EFFECT
SCHOOL SPACE	TEACHER ADMINISTRATOR RELATIONSHIP
SCHOOL STATISTICS	TEACHER ASSOCIATIONS
SCHOOL SUPERINTENDENTS	TEACHER ATTITUDES
SCHOOL SUPERVISION	TEACHER CHARACTERISTICS
SCHOOL SURVEYS	TEACHER CONTRACTS
SCHOOL TAXES	TEACHER DISCIPLINE
SCHOOL VANDALISM	TEACHER DISMISSAL
SECURITY PERSONNEL	TEACHER EMPLOYMENT
SEX DISCRIMINATION	TEACHER EVALUATION
SITE SELECTION	TEACHER MILITANCY
SPACE NEEDS	TEACHER PROMOTION
SPACE UTILIZATION	TEACHER RECRUITMENT
STAFF UTILIZATION	TEACHER RESPONSIBILITY
STATE AID	TEACHER ROLE
STATE BOARDS OF EDUCATION	TEACHER SALARIES
STATE DEPARTMENTS OF EDUCATION	TEACHER STRIKES
STATE FEDERAL AID	TEACHER SUPERVISION
STATE FEDERAL SUPPORT	TEACHER UNIONS
STATE GOVERNMENT	TEAM ADMINISTRATION
STATE LEGISLATION	TEAM TEACHING
STATE PROGRAMS	TENURE
STATE SCHOOL DISTRICT RELATIONSHIP	TELEBUCK SELECTION
STATE STANDARDS	THEORIES
STATE SUPERVISORS	THermal ENVIRONMENT
STATE SURVEYS	TOILET FACILITIES
STATEWIDE PLANNING	TORTS
STATISTICAL STUDIES	TRIMESTER SCHEDULE
STUDENT ATTITUDES	TRUANCY
STUDENT CENTERED CURRICULUM	UNIONS
STUDENT COSTS	VERTICAL ORGANIZATION
STUDENT ENROLLMENT	VOUCHERS
STUDENT PARTICIPATION	WINDOWLESS ROOMS
STUDENT PROBLEMS	WORKING WOMEN
STUDENT RECORDS	YEAR ROUND SCHOOLS
STUDENT RESPONSIBILITY	
STUDENT RIGHTS	
STUDENT SCHOOL RELATIONSHIP	

HANDICAPPED AND GIFTED CHILDREN (EC)

Scope of Interest

Handicapped—All aspects of the education and development of handicapped persons. Handicaps may range from mild to severe and include hearing and visual impairments, mental retardation, physical handicaps, behavior disorders, learning disabilities, speech impairments, health impairments, multiple handicaps, and autism. Also included are high risk children such as the abused or neglected, and handicapped children among adjudicated youth, cultural or ethnic minorities, the economically disadvantaged, and the geographically isolated. Covered are educational needs and services for the handicapped in all educational settings (i.e., public or private schools, the home, programs at all educational levels, institutional and community programs). Among aspects of handicapped services included are prevention of handicaps, identification of the handicapped, early intervention programs, services for low incidence handicapped populations, deinstitutionalization, mainstreaming, vocational and lifelong education for the handicapped, and applications of technology for the handicapped.

Gifted—All aspects of the education and development of gifted persons. The gifted include those with either outstanding intellectual ability, outstanding talent in any specific area of achievement, or high creative ability. Among areas covered are identification of the gifted, differentiated curriculum for the gifted, enrichment, and acceleration programs, the underachieving gifted, the geographically isolated gifted, the disadvantaged gifted, the gifted within minority groups, counseling the gifted, leadership development, and creativity.

Handicapped and Gifted—Areas relevant to both handicapped and gifted populations include early childhood education, curriculum, teaching methods, administration, career education, teacher preparation, legislative and judicial requirements, program development and evaluation, and related services.

Notes

The following are subject areas considered within the purview of the ERIC Clearinghouse on Handicapped and Gifted:

1. Federal and State Policy. Documents concerning interpretation of Federal and State law as well as court cases concerning educational services for the handicapped and gifted.
2. Mainstreaming. Documents concerning integration of the handicapped into the regular class, including special approaches of the regular teacher, improving attitudes of non-handicapped children and adults toward the handicapped,

coordination among professionals serving the handicapped child, and the individualized education program.

3. Parent Education. Documents that concern education of parents of exceptional children.
4. Minority Groups. Documents concerning handicapped and gifted persons within economic, cultural, racial, ethnic, or language minority groups.
5. In the overlap area of vocational/career education for the handicapped/gifted, EC and CE have agreed to the following resolution:
EC will be responsible for documents in this area that are:
 - sponsored by the U.S. Office of Special Education
 - sponsored by state departments of special education
 - produced by organizations with which EC already has formal acquisitions arrangements (as determined by the ERIC Acquisitions Arrangements list).CE will be responsible for all documents in this area not falling under the above criteria.

Brief Statement

All aspects of the education and development of the handicapped and gifted, including prevention, identification and assessment, intervention, and enrichment, both in special settings and within the mainstream.

SENSORY AIDS
SEVERE DISABILITIES
SEVERE MENTAL RETARDATION
SIGN LANGUAGE
SLOW LEARNERS
SPECIAL CLASSES
SPECIAL EDUCATION
SPECIAL EDUCATION TEACHERS
SPECIAL HEALTH PROBLEMS
SPECIAL SCHOOLS
SPEECH AND HEARING CLINICS
SPEECH HANDICAPS
SPEECH THERAPY
STUTTERING
TALENT
TALENT IDENTIFICATION
TEST BIAS
TOTAL COMMUNICATION
UNDERACHIEVEMENT
VISUAL IMPAIRMENTS
VISUALLY HANDICAPPED MOBILITY
VOCATIONAL EDUCATION
VOCATIONAL REHABILITATION
VOICE DISORDERS
WHEEL CHAIRS

SENSORY AIDS
SEVERE DISABILITIES
SEVERE MENTAL RETARDATION
SIGN LANGUAGE
SLOW LEARNERS
SPECIAL CLASSES
SPECIAL EDUCATION
SPECIAL EDUCATION TEACHERS
SPECIAL HEALTH PROBLEMS
SPECIAL SCHOOLS
SPEECH AND HEARING CLINICS
SPEECH HANDICAPS
SPEECH THERAPY
STUTTERING
TALENT
TALENT IDENTIFICATION
TEST BIAS
TOTAL COMMUNICATION
UNDEPACHIEVEMENT
VISUAL IMPAIRMENTS
VISUALLY HANDICAPPED MOBILITY
VOCATIONAL EDUCATION
VOCATIONAL REHABILITATION
VOICE DISORDERS
WHEEL CHAIRS

LANGUAGES AND LINGUISTICS (FL)

Scope of Interest

Linguistics, encompassing both theoretical and applied materials that have implications for instruction in the language sciences: study of language in general as well as the study of the structure of specific languages, both natural and artificial, including such areas as phonology, morphology, syntax, semantics, and all of their subcategories; sociolinguistics, including dialectology, language attitudes, pragmatics, code switching, language variation, and other aspects of the social context of language use; psycholinguistics, including all facets of language acquisition and processing, first and second language acquisition, the physiology and psychology of language learning, memory and cognition as they relate to language acquisition and processing, and language handicaps.

Second language instruction, including methodology, pedagogical research, teacher training, curriculum development, evaluation and testing as they relate to the teaching and learning of all languages, both commonly and uncommonly taught, as well as English as a second language and bilingual education.

Culture, as related specifically to language, language teaching/learning, intercultural communication, and the teaching of culture in the language classroom; study abroad and international educational exchange.

Notes

Documents concerned with second language teaching or learning, or with native or second language teaching or learning for non-English speakers, are covered by FL. FL does not cover the teaching and learning of English as a native language in a formal instructional setting. It does, however, cover the acquisition of English as a native language in non-instructional settings.

Documents concerning culture are within the FL scope only when they deal specifically with language, language teaching or learning, or inter-cultural communication.

There is no age or grade restriction to the FL scope of interest, which covers material concerning all educational and learning levels and all ages.

Brief Statement

Languages and language sciences; theoretical and applied linguistics; all areas of foreign language, second language, and linguistics instruction, pedagogy, or methodology; psycholinguistics and the psychology of language learning; cultural and intercultural context of languages; application of linguistics in language teaching; bilingualism and bilingual education; sociolinguistics; study abroad and international exchanges; teacher training and qualifications specific to the teaching of foreign languages and second languages; commonly and uncommonly taught languages, including English as a second language; related curriculum developments and problems.

FL APPLICABLE TERMS

ACOUSTIC PHONETICS
ADULT LITERACY (FOREIGN/SECOND LANGUAGE)
AFRICAN LANGUAGES
AFRO ASIATIC LANGUAGES
ALLOPHONY
AMERICAN INDIAN CULTURE
AMERICAN INDIAN LANGUAGES
ANTHROPOLOGICAL LINGUISTICS
APPLIED LINGUISTICS
ARTICULATION (SPEECH)
ARTIFICIAL LANGUAGES
ATHAPASCAN LANGUAGES
AUDIC ACTIVE LABORATORIES
AUDIC VIDEO LABORATORIES
AUDICLINGUAL METHODS
AUDICVISUAL MATERIALS
AUSTRALIAN ABORIGINAL LANGUAGES
AUSTRO ASIATIC LANGUAGES
BALTIK LANGUAGES
BASIC SKILLS (FOREIGN LANGUAGE)
BILINGUAL EDUCATION
BILINGUAL SCHOOLS
BILINGUAL STUDENTS
BILINGUAL TEACHER AIDES
BILINGUAL TEACHERS
BILINGUALISM
BLACK DIALECTS
CHILI LANGUAGE
CLASSICAL LANGUAGES (INSTRUCTION)
CLOZE PROCEDURES
CODE SWITCHING (LANGUAGE)
COGNITIVE DEVELOPMENT (PSYCHOLINGUISTICS)
COGNITIVE STYLES (LANGUAGE LEARNING)
COMMUNICATION (VERBAL, ORAL--INSTRUCTION, SCIENTIFIC LINGUISTICS)
COMMUNICATIVE COMPETENCE
COMPUTATIONAL LINGUISTICS
COMPUTER ASSISTED INSTRUCTION (LANGUAGES)
CONSCIENTISTS
CONTRASTIVE LINGUISTICS
CONVERSATIONAL LANGUAGE COURSES
CRECIES
CROSS CULTURAL STUDIES
CULTURAL CONTEXT, AWARENESS, DIFFERENCES
CURRICULUM DEVELOPMENT (ENGLISH AS A SECOND LANGUAGE, FOREIGN LANGUAGE, BILINGUAL EDUCATION)
DEEP STRUCTURE
DESCRIPTIVE LINGUISTICS
DIACHRONIC LINGUISTICS
DIALECTS AND DIALECT STUDIES
DICTIONARIES
DISCOURSE ANALYSIS
DISTINCTIVE FEATURES (LINGUISTICS)
DAVIDIAN LANGUAGES
ENGLISH (SECOND LANGUAGE)
ENGLISH FOR SPECIAL PURPOSES
ERROR ANALYSIS (LANGUAGE)
ESKIMO ALUTT LANGUAGES
ETHNIC GROUPS
ETHNOLINGUISTICS
EXCHANGE PROGRAMS
FLES
FOREIGN CULTURE
FOREIGN LANGUAGE FILMS
FOREIGN LANGUAGES
FOREIGN STUDENTS (LANGUAGE, CULTURE PROBLEMS)
FORM CLASSES (LANGUAGE)
GENERATIVE GRAMMAR
GENERATIVE PHONOLOGY
GRAMMAR
GRAPHEMES
IMMERSION PROGRAMS
IMMIGRANTS (NONSPEAKERS OF ENGLISH)
INDO EUROPEAN LANGUAGES
INDOCHINESE
INSTRUCTIONAL MATERIALS AND GUIDES (FOREIGN LANGUAGE, ENGLISH AS A SECOND LANGUAGE, AND BILINGUAL EDUCATION)
INTENSIVE LANGUAGE COURSES
INTERFERENCE (LANGUAGE LEARNING)
INTERNATIONAL EDUCATION
INTERPRETING (LANGUAGES)
LANGUAGE ABILITY - LANGUAGE AIDS
LANGUAGE ATTITUDES
LANGUAGE AFFINITION

LANGUAGE CLASSIFICATION
 LANGUAGE DEVELOPMENT
 LANGUAGE DOMINANCE
 LANGUAGE ENVIRONMENT
 LANGUAGE FLUENCY
 LANGUAGE INSTRUCTION (FOREIGN LANGUAGE)
 LANGUAGE LABORATORIES
 LANGUAGE LABORATORY EQUIPMENT
 LANGUAGE LABORATORY USE
 LANGUAGE LEARNING LEVELS
 LANGUAGE MAINTENANCE
 LANGUAGE OF INSTRUCTION
 LANGUAGE PATTERNS
 LANGUAGE PLANNING
 LANGUAGE PROCESSING
 LANGUAGE PROFICIENCY
 LANGUAGE PROGRAMS
 LANGUAGE RECORDS (PHONOGRAPH)
 LANGUAGE RESEARCH
 LANGUAGE RHYTHM
 LANGUAGE ROLE
 LANGUAGE SCIENCES
 LANGUAGE SKILLS
 LANGUAGE STANDARDIZATION
 LANGUAGE STYLES
 LANGUAGE TESTS
 LANGUAGE TYPOLOGY
 LANGUAGE UNIVERSALS
 LANGUAGE USAGE
 LANGUAGE VARIATION
 LANGUAGES FOR SPECIAL PURPOSES
 LEXICOLOGY
 LINGUISTIC BORROWING
 LINGUISTIC COMPETENCE
 LINGUISTIC DIFFICULTY
 (INHERENT)
 LINGUISTIC PATTERNS
 LINGUISTIC PERFORMANCE
 LINGUISTIC THEORY
 LINGUISTICS
 LISTENING COMPREHENSION
 (PSYCHOLINGUISTICS, FOREIGN LANGUAGE)
 LITERACY (FOREIGN/SECOND LANGUAGE)
 LITERATURE (FOREIGN LANGUAGE INSTRUCTION)
 MALAYO POLYNESIAN LANGUAGES
 MINORITY GROUPS (ENGLISH AS A SECOND LANGUAGE, BILINGUAL EDUCATION, SOCIOLINGUISTICS)

MODERN LANGUAGES
 MORPHEMES
 MORPHOLOGY (LANGUAGES)
 MORPHOPHONEMICS
 NATIVE SPEAKERS
 NEGATIVE FORMS (LANGUAGE)
 NEUROLINGUISTICS
 NOMINALS
 NONSTANDARD DIALECTS
 NONVERBAL COMMUNICATION
 OFFICIAL LANGUAGES
 PARALINGUISTICS
 PATTERN DRILLS (LANGUAGE)
 PHONEME GRAPHEME
 CORRESPONDENCE
 PHONEMES
 PHONEMIC ALPHABETS
 PHONEMICS
 PHONETICS
 PHONOLOGICAL UNITS
 PHONOLOGY
 PHRASE STRUCTURE
 PLURALS
 PRAGMATICS
 PROGRAMED INSTRUCTION AND LANGUAGES
 PRONOUNS
 PSYCHOLINGUISTICS
 READING COMPREHENSION
 (PSYCHOLINGUISTICS)
 READING INSTRUCTION
 (PSYCHOLINGUISTICS)
 READING SKILLS (FOREIGN/SECOND LANGUAGE)
 REFUGEE EDUCATION (LANGUAGE)
 REGIONAL DIALECTS
 ROMANCE LANGUAGES
 SECOND LANGUAGE LEARNING
 SECOND LANGUAGES
 SEMANTICS
 SEMIOTICS
 SEMITIC LANGUAGES
 SENTENCE STRUCTURE
 SENTENCES
 SIGN LANGUAGE
 SINO TIBETAN LANGUAGES
 SLAVIC LANGUAGES
 SOCIAL DIALECTS
 SOCIOLINGUISTICS
 SPANISH SPEAKING
 SPEAKING
 —
 STANDARD SPOKEN USAGE

STRESS (PHONOLOGY)
STRUCTURAL ANALYSIS
STRUCTURAL GRAMMAR
STRUCTURAL LINGUISTICS
STUDY ABROAD
SUFFIXES
SUGGESTOPEDIA
SUPASEGMENTALS
SURFACE STRUCTURE
SWEDISH
SYLLABLES
SYNTAX
TEACHER EDUCATION (ENGLISH AS
A SECOND LANGUAGE, FOREIGN
LANGUAGE, BILINGUAL
EDUCATION)
TEACHING METHODS (ENGLISH AS A
SECOND LANGUAGE, FOREIGN
LANGUAGE, BILINGUAL
EDUCATION)
TONE LANGUAGES
TRADITIONAL GRAMMAR
TRANSFORMATICA GENERATIVE
GRAMMAR
TRANSPOSITIONS (LANGUAGE)
TRANSLATION
UNCOMMONLY TAUGHT LANGUAGES
URALIC AL泰IC LANGUAGES
URBAN LANGUAGE
VERBAL ABILITY
VERBS
VOCABULARY AND VOCABULARY
DEVELOPMENT
VOWELS
WORD FREQUENCY
WORD LISTS
WRITING SKILLS (FOREIGN
LANGUAGE)
WRITTEN LANGUAGE

HIGHER EDUCATION (HE)

Scope of Interest

Higher education, defined as education beyond the secondary level that leads to a four-year, masters', doctoral, or professional degree and that includes courses and programs designed to enhance or update skills obtained in these degree programs. The scope of coverage does not include higher education documents pertaining to counseling and personnel services, junior and community colleges, adult, vocational, and continuing education, and the education of teachers, since these are areas designated to other clearinghouses.

The scope covers programs, conditions, or problems at colleges and universities. Contextual areas include: student programs, conditions, and problems in colleges and universities (including those of foreign students); academic advising; university and college faculty; graduate and professional education; professional continuing education; governance and the management of higher educational institutions including the application of corporate management techniques (e.g., systems analysis, computer simulation, organization theory); legal issues; financing; planning and evaluation; facilities--their structural design, management implications, and impact on the educational process; curriculum and instructional problems, programs, and development; university extension programs; interinstitutional arrangements and consortia; related State and Federal programs and policies, including master plans; programs of religious and theological institutions of higher education; institutional research and statistics on higher education as a social phenomenon and its relationships within the society as a whole; comparative higher education; distance education for undergraduate or graduate level programs; study abroad, international and intercultural education at the postsecondary level; computers and telecommunications when applied to specific higher education instructional or administrative purposes; and business or industry educational programs leading to a degree.

Notes

Faculty development courses and inservice training programs are encompassed by higher education. Continuing education or professional education courses that lead to a degree or its equivalent, or that update degrees or professional programs (including allied health occupations, such as baccalaureate nursing), are within the HE scope. Although the CG Clearinghouse covers counseling and personnel services, academic advising is within the HE scope. Documents dealing primarily with designated minority groups such as American Indians, Mexican Americans, or Puerto Ricans who are coincidentally college students are referred to the RC or UD Clearinghouses. Programs designed to prepare administrators for higher education are in the HE scope. The HE scope includes

systems analysis and computer assisted learning when treated as an aspect of higher education management, planning, or means of instruction. Documents concerned with the interplay between facility design, maintenance, or use and the program of a higher education institution would be within the HE scope. Those documents concerned primarily with a facility as a physical entity are in the scope of the EA Clearinghouse. Legal issues peculiar to colleges and universities are within the HE scope, although more general legal issues go to the EA Clearinghouse. Documents on the Scholastic Aptitude Test (SAT) as a college entrance criterion go to HE; SAT construction, test-giving, etc., go to TM. Documents dealing with college science/math faculty and college administrators are within the HE scope, as are general enrollment trend documents on graduate programs that include science/math as one component; college level science/math content documents are claimed by SE.

Brief Statement

Topics relating to college and university students, conditions, problems, and programs. Curricular and instructional problems and programs, and institutional research at the college or university level. Federal programs, professional education (medicine, law, etc.), professional continuing education, collegiate computer-assisted learning and management, graduate education, university extension programs, teaching-learning, legal issues and legislation, planning, governance, finance, evaluation, interinstitutional arrangements, management of institutions of higher education, and business or industry educational programs leading to a degree.

THE APPLICABLE TERMS

ACADEMIC ACHIEVEMENT	COLLEGE FRESHMEN
ACADEMIC FREEDOM	COLLEGE GOVERNING BOARDS
ACADEMIC PERSISTANCE	COLLEGE GRADUATES
ACADEMIC RANK (PROFESSIONAL)	COLLEGE HIGH SCHOOL
ACADEMIC STANDARDS	COOPERATION
ACCESS TO EDUCATION	COLLEGE HOUSING
ACCOUNTABILITY	COLLEGE INSTRUCTION
ACCREDITATION (INSTITUTIONS)	COLLEGE MAJORS
ACTIVISM	COLLEGE PLACEMENT
ADMINISTRATIVE ORGANIZATION	COLLEGE PLANNING
ADMINISTRATIVE PERSONNEL	COLLEGE PREPARATION
ADMINISTRATIVE POLICY	COLLEGE ROLE
ADMINISTRATIVE PROBLEMS	COLLEGE STUDENTS
ADMINISTRATOR ATTITUDES	COLLEGES
ADMINISTRATOR BACKGROUND	COMMUNITY SCHOOL RELATIONSHIP
ADMINISTRATOR CHARACTERISTICS	COMMUNITY SERVICE PROGRAMS
ADMINISTRATOR EDUCATION	COMPENSATORY PROGRAMS
ADMINISTRATOR EVALUATION	COMPETITIVE SELECTION
ADMINISTRATOR RESPONSIBILITY	CONSORTIA
ADMINISTRATOR ROLE	CONSTITUTIONAL LAW
ADMINISTRATION SELECTION	CONTINUOUS LEARNING
ADMISSION CRITERIA	CORE CURRICULUM
ADULT EDUCATION	COURSE DESCRIPTIONS
ADULT STUDENTS	COURSE EVALUATION
ADVANCED EDUCATION	COURT LITIGATION
AFFIRMATIVE ACTION	CREDIT COURSES
ALUMNI	DEANS
ARTICULATION (EDUCATION)	DEATH EDUCATION
BACHELORS DEGREES	DECENTRALIZED LIBRARIES
BLACK COLLEGES	DEGREE REQUIREMENTS
BLACK STUDENTS	DEGREES (TITLES)
BLACK ADMINISTRATOR RELATIONSHIP	DENTAL SCHOOLS
BUDGETS/BUDGETING	DEPARTMENT HEADS
CAMPUSES	DEVELOPING INSTITUTIONS
CAREER CHOICE	DISTANCE EDUCATION
CAREER LADERS	DOCTORAL DEGREES
CAREER OPPORTUNITIES	DOCTORAL PROGRAMS
CAREER PLANNING	DOCTORAL THESSES
CHURCH RELATED COLLEGES	DROPOUTS
CLINICAL EXPERIENCE	EDUCATIONAL ADMINISTRATION
COLLECTIVE BARGAINING	EDUCATIONAL DEMAND
COLLEGE ADMINISTRATION	EDUCATIONAL EQUITY (FINANCE)
COLLEGE ADMISSION	EDUCATIONAL FACILITIES
COLLEGE SECOND STUDENTS	EDUCATIONAL FINANCE
COLLEGE CHOICE	EDUCATIONAL SUPPLY
COLLEGE COOPERATION	EMANCIPATED STUDENTS
COLLEGE CURRICULUM	EMPLOYER-EMPLOYEE RELATIONSHIP
COLLEGE DESEGREGATION	ENDOWMENT FUNDS
COLLEGE ENTRANCE EXAMINATIONS	ENGINEERING EDUCATION
COLLEGE ENVIRONMENT	ENROLLMENT PROJECTIONS
COLLEGE FACULTY	ENROLLMENT RATE
	ENROLLMENT TRENDS

EQUAL EDUCATION	LEGAL EDUCATION
EVENING COLLEGES	LEGAL PROBLEMS
EXPERIENTIAL LEARNING	LEGAL RESPONSIBILITY
EXPERIMENTAL COLLEGES	LEGISLATION
EXTENSION EDUCATION	LIBERAL ARTS
EXTERNAL DEGREE PROGRAMS	LOAN REPAYMENT
FACULTY ADVISORS	MANAGEMENT DEVELOPMENT
FACULTY DEVELOPMENT	MANAGEMENT EDUCATION
FACULTY MOBILITY	MARKETING
FACULTY ORGANIZATIONS	MASTERS DEGREES
FACULTY WORKLOAD	MASTERS THESES
FEDERAL AID	MEDICAL EDUCATION
FEDERAL LEGISLATION	MEDICAL STUDENTS
FEDERAL REGULATION	MINORITY GROUPS
FELLOWSHIPS	MULTICAMPUS COLLEGES
FIELD EXPERIENCE PROGRAMS	MUSEUMS
FINANCIAL NEEDS	NEEDS ASSESSMENT
FINANCIAL POLICY	NONCAMPUS COLLEGES
FINANCIAL SUPPORT	NONCREDIT COURSES
FOREIGN STUDENTS	NONMAJORS
FRAILTY	NONTRADITIONAL STUDENTS
GOVERNANCE	OMBUDSMEN
GOVERNING BOARDS	OPEN ENROLLMENT
GOVERNMENT SCHOOL RELATIONSHIP	OPEN UNIVERSITIES
GRADE POINT AVERAGE	ORGANIZATIONAL CLIMATE
GRADE PREDICTIONS	ORGANIZATIONAL DEVELOPMENT
GRADUATE MEDICAL EDUCATION	PARENT FINANCIAL SUPPORT
GRADUATE MEDICAL STUDENTS	PART TIME STUDENTS
GRADUATE STUDENTS	PASS FAIL GRADING
GRADUATE SURVEYS	PERFORMANCE BASED EDUCATION
GRANTS	PHARMACEUTICAL EDUCATION
HIGHER EDUCATION	PHILANTHROPICAL FOUNDATIONS
HONOR CODES	POLICY FORMATION
HUMANITIES INSTRUCTION	POSTDOCTORAL EDUCATION
INDEPENDENT STUDY	POSTSECONDARY EDUCATION
INDIVIDUALIZED CURRICULUM	POSTSECONDARY EDUCATION AS A FIELD OF STUDY
INDIVIDUALIZED INSTRUCTION	PRESIDENTS
INSTITUTIONAL ADMINISTRATION	PRETESTING
INSTITUTIONAL ADVANCEMENT	PRIVATE COLLEGES
INSTITUTIONAL CHARACTERISTICS	PRIVATE FINANCIAL SUPPORT
INSTITUTIONAL RESEARCH	PROFESSIONAL ASSOCIATIONS
INSTITUTIONAL ROLE	PROFESSIONAL CONTINUING EDUCATION
INSTRUCTIONAL INNOVATION	PROFESSIONAL EDUCATION
INTEGRATED CURRICULUM	PROFESSIONAL OCCUPATIONS
INTELLECTUAL DISCIPLINES	PROFESSIONAL RECOGNITION
INTERDISCIPLINARY APPROACH	PROFESSORS
INTERINSTITUTIONAL COOPERATION	PROGRAM ADMINISTRATION
INTERNSHIP PROGRAMS	PROGRAM BUDGETING
LAND GRANT UNIVERSITIES	PROGRAM COSTS
LAW SCHOOLS	PROGRAM DEVELOPMENT
LEADERSHIP	
LEAVE OF ABSENCE	

d

PROGRAM EVALUATION
PROGRAM PLANNING
PSYCHIATRY
PSYCHOLOGY
RACIAL ATTITUDES
RACIAL DISCRIMINATION
RATING SCALES
REGIONAL COOPERATION
RELEVANCE (EDUCATION)
RELATIONAL FAMILIES
RESIDENT STUDENTS
RESIDENTIAL COLLEGES
RETRENCHMENT
RACE DISCRIMINATION
SABBATICAL LEAVES
SALARIES
SALARY DIFFERENTIALS
SCHEDULING
SCHOLARSHIPS
SCHOOL HOLDING POWER
SCHOOL SURVEYS
SEMINARS
SEX BIAS
SEX DISCRIMINATION
SEX FAIRNESS
SHORT COURSES
SOCIOECONOMIC INFLUENCES
SOCIOCITIES
SPECIAL DEGREE PROGRAMS
STANDARDIZED TESTS
STATE AID
STATE COLLEGES
STATE LEGISLATION
STATE PARENTS
STATE UNIVERSITIES
STATEWIDE PLANNING
STATISTICAL STUDIES
STUDENT ABILITY
STUDENT ALIENATION
STUDENT AFFILIATION
STUDENT ATTITUDES
STUDENT BEHAVIOR
STUDENT CHARACTERISTICS
STUDENT COLLEGE RELATIONSHIP
STUDENT EVALUATION
STUDENT EVALUATION OF TEACHER PERFORMANCE
STUDENT EXCHANGE PROGRAMS
STUDENT FINANCIAL AID
STUDENT GOVERNMENT
STUDENT ICAN PROGRAMS
STUDENT ORGANIZATIONS
STUDENT PARTICIPATION
STUDENT RECRUITMENT
STUDENT RIGHTS
STUDENT ROLE
STUDENT TEACHER RELATIONSHIP
SUMMER INSTITUTES
TEACHER ATTITUDES
TEACHER CHARACTERISTICS
TEACHER IMPROVEMENT
TEACHER RECRUITMENT
TEACHER ROLE
TEACHER SALARIES
TEACHER SUPPLY AND DEMAND
TEACHER WELFARE
TEACHING ASSISTANTS
TEACHING CONDITIONS
TEACHING LOAD
TEACHING METHODS
TEACHING SKILLS
TENURE
TEST VALIDITY
TESTING
TRANSFER POLICY
TRANSFER STUDENTS
TRUSTEES
TRUSTS (FINANCIAL)
TUITION
TUTORIAL PROGRAMS
UNDERGRADUATE STUDENTS
UNDERGRADUATE STUDY
UNIVERSITIES
UNIVERSITY ADMINISTRATION
UNIVERSITY EXTENSION
URBAN UNIVERSITIES
VETERINARY MEDICINE
WOMEN FACULTY
WOMENS ATHLETICS (COLLEGIATE)
WOMENS EDUCATION
WORK STUDY PROGRAMS

INFORMATION RESOURCES (IR)

Scope of Interest

The ERIC Clearinghouse on Information Resources covers two major fields: educational technology and library/information science. All levels of education are included within the scope, as well as the professional preparation of educational technologists, librarians, and information specialists for education-related responsibilities. In educational technology, emphasis is placed on the design, development, and evaluation of instruction and learning. All aspects of media and technology as they are applied to teaching and learning are covered, including the delivery of instruction via computers, microcomputers, films, radio, television, videodiscs, and other audiovisual devices. Techniques used include computer-assisted and computer-managed instruction, simulation and gaming, mastery learning, and programmed instruction. For library/information science, the focus is on the management, operation, and use of libraries and information centers in educational settings. Topics covered range from media selection and organization to library automation, bibliographic instruction, networking, and learning resource centers. Information technology is covered as it applies to both fields, including the storage, processing, and delivery of information by such means as electronic networks, teleconferencing, online searching, and computer-based information systems.

Notes

When the major thrust of a document is deemed to be the technology employed, the document is regarded as within the scope of IR. When the major thrust of the document is deemed to be the subject content, the document is regarded as within the scope of the relevant subject-related clearinghouse.

If the subject of a bibliography is within the scope of another clearinghouse, the document is transferred to that clearinghouse. It may be retained by IR, however, if the techniques of compiling the bibliography or achieving bibliographic control of the literature are emphasized.

Brief Statement

Educational technology and library and information science at all levels. Instructional design, development, and evaluation are the emphases within educational technology, along with the media of educational communication: computers and microcomputers, telecommunications (cable, broadcast, satellite), audio and video

recordings, film and other audiovisual materials, as they pertain to teaching and learning. Within library and information science the focus is on the operation and management of information services for education-related organizations. All aspects of information technology related to education are considered within scope.

IN APPLICABLE TERMS

ABSTRACTING
ABSTRACTS
ACADEMIC LIBRARIES
ADVANCED SYSTEMS
AEREOGRAPHY
ANALOG COMPUTERS
ANIMATION
ARCHIVES
ARTIFICIAL INTELLIGENCE
AUDIENCES
AUDIO ACTIVE LABORATORIES
(TECHNOLOGY)
AUDIO EQUIPMENT
AUDIO PASSIVE LABORATORIES
(TECHNOLOGY)
AUDIO VIDEO LABORATORIES
(TECHNOLOGY)
AUDIOTAPE RECORDINGS
AUDIOVISUAL AIDS
AUDIOVISUAL AIDS (LIBRARIES OR
INSTRUCTIONAL MAT. CTR.)
AUDIOVISUAL CENTERS
AUDIOVISUAL COMMUNICATION
AUDIOVISUAL COORDINATORS
AUDIOVISUAL DIRECTORS
AUDIOVISUAL INSTRUCTION
AUDIOVISUAL MEDIA
AUDIOVISUAL PROGRAMS
AUTONINSTRUCTONAL AIDS
AUTONINSTRUCTONAL LABORATORIES
AUTONINSTRUCTONAL METHODS
AUTOMATIC ABSTRACTING
AUTOMATIC INDEXING
AUTOMATION
BIBLIOGRAPHIC CITATIONS
BIBLIOGRAPHIC COUPLING
BIBLIOGRAPHY
BOOK CATALOGS
BOOK MATERIALS
BOOK THEFTS
BOOKLISTS
BOOKMOFILES
BOOKS
BRANCH LIBRARIES
BRANCHING
BROADCAST INDUSTRY
BROADCAST MEDIA
BROADCAST PERCEPTION EQUIPMENT
BROADCAST TELEVISION
BULLETIN BOARDS
CABLE TELEVISION (CATV)
CARTELS

CARTOONS
CATALOGS/CATALOGING
CENSORSHIP (LIBRARY MATERIALS
SELECTION, INFO. DISS.)
CENTERS OF INTEREST
CHALKBOARDS
CHARIS
CHILDREN'S GAMES
CITATION INDEXES
CLASSIFICATION
CLASSROOM GAMES
CLASSROOM LIBRARIES
CLEARINGHOUSES
CLOSED CIRCUIT TELEVISION
CODIFICATION
COGNITIVE OBJECTIVES
COLLEGE LIBRARIES
COLOR PRESENTATION
COLOR TELEVISION
COMMERCIAL TELEVISION
COMMUNICATION SATELLITES
COMMUNICATIONS (TECHNOLOGY)
COMMUNITY ANTENNAS
COMMUNITY INFORMATION SERVICES
COMPUTATIONAL LINGUISTICS
COMPUTER ASSISTED INSTRUCTION
COMPUTER BASED LABORATORIES
COMPUTER BASED REFERENCE
COMPUTER DEVELOPED INSTRUCTION
COMPUTER GRAPHICS
COMPUTER LITERACY
COMPUTER MANAGED INSTRUCTION
COMPUTER ORIENTED PROGRAMS
(LIBRARY AND INFO. CTR.
PROC.)
COMPUTER OUTPUT MICROFILM
COMPUTER PAINT FORMATS
COMPUTER PROGRAMS (LIBRARY AND
INFO. CTR. PROC.)
COMPUTER SCIENCE
COMPUTER SCIENCE EDUCATION
COMPUTER SPECIALISTS
COMPUTER STORAGE DEVICES
COMPUTER SYSTEMS
COMPUTER TECHNOLOGY
COMPUTERS
CONCORDANCES
CONTENT ANALYSIS
CONTINUOUS PROGRESS PLAN
COORDINATE INDEXES
COPYRIGHT
COUNTY LIBRARIES

Critical Path Method
 CURRENT AWARENESS SYSTEMS
 CYBERNETICS
 DATA
 DATA ANALYSIS
 DATA BASES
 DATA COLLECTION
 DATA PROCESSING
 DEPOSITORY LIBRARIES
 DIAGRAMS
 DIAL ACCESS INFORMATION SYSTEMS
 DICTIONARIES
 DICTIONARY CATALOGS
 DIGITAL COMPUTERS
 DISPLAY PANELS
 DISPLAY SYSTEMS
 DISSEMINATION OF INFORMATION
 DISTANCE EDUCATION
 DIVIDED CATALOGS
 DOCUMENT ANALYSTS
 DOCUMENTALISTS
 DOCUMENTARIES
 DOCUMENTATION
 ECONOMICS
 ECONOMICS OF INFORMATION
 ECONOMICS OF PUBLICATION
 EDUCATION FOR LIBRARIES
 EDUCATIONAL DIAGNOSIS
 EDUCATIONAL GAMES
 EDUCATIONAL MEDIA
 EDUCATIONAL RADIO
 EDUCATIONAL TECHNOLOGY
 EDUCATIONAL TELEVISION
 ELECTROMECHANICAL AIDS
 ELECTRONIC DATA PROCESSING
 ELECTRONIC EQUIPMENT
 ELECTRONIC MAIL
 ELEMENTARY SCHOOL LIBRARIES
 EXHIBITS
 FACSIMILE COMMUNICATION SYSTEMS
 FEEDBACK
 FILE ORGANIZATION AND SEARCH
 FILM LIBRARIES
 FILM PRODUCTION
 FILM STUDY
 FILMS
 FILMSTRIPS
 FIXED SERVICE TELEVISION
 FLEXIBLE SCHEDULING
 FLOW CHARTS

FOREIGN LANGUAGE FILMS
 GAME THEORY
 GAMES
 GLOSSARIES
 GOVERNMENT LIBRARIES
 GRAPHIC ARTS
 GRAPHS
 HIERARCHICAL CLASSIFICATION
 HOLOGRAPHY
 ILLUSTRATIONS
 INDEXES (LOCATORS)
 INDEXING
 INDIVIDUALIZED CURRICULUM
 INDIVIDUALIZED INSTRUCTION
 INDIVIDUALIZED PROGRAMS
 INFORMATION CENTERS
 INFORMATION DISSEMINATION
 INFORMATION NEEDS
 INFORMATION NETWORKS
 INFORMATION PROCESSING
 INFORMATION RETRIEVAL
 INFORMATION SCIENCE
 INFORMATION SCIENTISTS
 INFORMATION SEEKING
 INFORMATION SERVICES
 INFORMATION SOURCES
 INFORMATION SPECIALISTS
 INFORMATION STORAGE
 INFORMATION SYSTEMS
 INFORMATION TECHNOLOGY
 INFORMATION THEORY
 INFORMATION UTILIZATION
 INPUT OUTPUT ANALYSIS (LIBRARY AND INFO. CTR. PROC.)
 INPUT OUTPUT DEVICES (LIBRARY AND INFO. CTR. PROC.)
 INSTITUTIONAL LIBRARIES
 INSTRUCTIONAL AIDS
 INSTRUCTIONAL DESIGN
 INSTRUCTIONAL DEVELOPMENT
 INSTRUCTIONAL DEVELOPMENT
 INSTRUCTIONAL FILMS
 INSTRUCTIONAL MATERIALS
 INSTRUCTIONAL MATERIALS CENTERS
 INSTRUCTIONAL MEDIA
 INSTRUCTIONAL SYSTEMS
 INSTRUCTIONAL TECHNOLOGY
 INSTRUCTIONAL TELEVISION
 INSTRUCTOR CENTERED TELEVISION
 INTERLIBRARY LOANS
 INTERMEDIATE DIFFERENCES

JUNIOR COLLEGE LIBRARIES
KINESCOPE RECORDINGS
LANGUAGE LABORATORIES
LANGUAGE LABORATORY EQUIPMENT
LARGE GROUP INSTRUCTION
LASERS
LIBRARIES
LEARNING CHARACTERISTICS
LEARNING LABORATORIES
LEARNING RESOURCES CENTERS
LEGISLATIVE REFERENCE LIBRARIES
LEXICOGRAPHY
LEXICOLOGY
LEXICOLOGY (DOCUMENT PROCESSING)
LIBRARIANS
LIBRARIANSHIP
LIBRARIES
LIBRARY ACQUISITIONS
LIBRARY ADMINISTRATION
LIBRARY AIDS
LIBRARY AND INFORMATION PROCESSING
LIBRARY AND INFORMATION SCIENCE PERSONNEL
LIBRARY AND INFORMATION SYSTEMS
LIBRARY ASSOCIATIONS
LIBRARY AUTOMATION
LIBRARY CIRCULATION
LIBRARY COLLECTIONS
LIBRARY COOPERATION
LIBRARY EDUCATION
LIBRARY EQUIPMENT
LIBRARY EXHIBITIONS
LIBRARY EXTENSION
LIBRARY FACILITIES
LIBRARY GUIDES
LIBRARY INSTRUCTION
LIBRARY MATERIALS
LIBRARY MATERIALS SELECTION
LIBRARY NETWORKS
LIBRARY ORGANIZATIONS
LIBRARY PLANNING
LIBRARY PROGRAMS
LIBRARY REFERENCE SERVICES
LIBRARY RESEARCH
LIBRARY SCIENCES
LIBRARY SCHOOL
LIBRARY SCIENCE
LIBRARY SERVICES

LIBRARY SKILLS
LIBRARY SPECIALISTS
LIBRARY STANDARDS
LIBRARY SURVEYS
LIBRARY TECHNICAL PROCESSES
LIBRARY TECHNICIANS
LIBRARY TRAINING
LIGHTING
LINEAR PROGRAMMING
LINGUISTICS (ELECTRONIC DATA PROCESSING)
LINKING AGENTS
LITERATURE GROWTH
LITERATURE SEARCHES
MACHINE FORMATS
MACHINE TRANSLATION
MAGNETIC TAPE CASSETTE RECORDER
MAGNETIC TAPE CASSETTES
MAGNETIC TAPES
MAN-MACHINE SYSTEMS (DOCUMENT STORAGE AND RETRIEVAL)
MANAGEMENT GAMES
MANAGEMENT INFORMATION SYSTEMS
MANAGEMENT SYSTEMS (TECHNOLOGY)
MANPOWER NEEDS (LIBRARIANS AND INFORMATION SCIENTISTS)
MAPS
MASS MEDIA
MASTER TAPES (AUDIO)
MATERIAL DEVELOPMENT
MECHANICAL TEACHING AIDS
MEDIA (NON PRINT)
MEDIA RESEARCH
MEDIA SELECTION
MEDIA SPECIALISTS
MEDIA TECHNOLOGY
MEDICAL LIBRARIES
MEDICAL RECORD LIBRARIANS
MICROCOMPUTERS
MICROFICHE
MICROFILM
MICROFORM READER PRINTERS
MICROFORM READERS
MICROFORM TECHNOLOGY
MICROFORMS
MICROPHONES
MICROREPRODUCTION
MICROTEACHING
MODELS
MULTICHANNEL PROGRAMMING

MULTIMEDIA INSTRUCTION
 MUSEUMS
 NATIONAL LIBRARIES
 NCN EBOOK MATERIALS
 NCNGFADEI CLASSES
 NCNGPADED SYSTEM
 NCNFRINT RESOURCES
 NCN PROFESSIONAL PERSONNEL
 (LIB./INFO. SCI.
 TECHNICIANS)
 ON LINE SYSTEMS
 (ONLINE OR CN LINE CATALOGS
 CPAQUE PROJECTORS
 OPEN CIRCUIT TELEVISION
 OPEN UNIVERSITIES
 OPTICAL SCANNERS
 OPTICIAL FRANCHISING
 OVERHEAD PROJECTORS
 PERIODICALS
 PERMUTED INDEXES
 PHCNCGRAPH RECORDS
 PHCNOTAPE PECCEEDINGS
 PHCTICGPAPHIC EQUIPMENT
 PHOTOGRAPHY/PHOTOGRAPHY
 PRINT FORMATS
 PRODUCTION TECHNIQUES
 PROGAMED INSTRUCTION
 PROGRAMED MATERIALS
 PROGAMED TEXTS
 PROGRAMED TUTORING
 PROGAMED UNITS
 PROGRAMERS
 PROGRAMING (BROADCAST)
 PROGRAMING LANGUAGES
 PROGRAMING TECHNIQUES
 PROJECTION EQUIPMENT
 PROJECTORS
 PROMPTING
 PUBLIC LIBRARIES
 PUBLIC TELEVISION
 PUBLICATIONS AND REFERENCE
 MATERIALS
 PUBLISHING INDUSTRY
 PUZZLES
 QUESTION NEGOTIATION
 RADIC
 RADIC TECHNOLOGY
 REACTION TIME
 READING GAMES
 REALIA
 RECALL (INFORMATION RETRIEVAL)
 RECORDERES (TAPE)

RECORDERS (VTR)
 REFERENCE MATERIALS
 REGIONAL LIBRARIES
 RELEVANCE (INFORMATION
 RETRIEVAL)
 REPETITIVE FILM SHOWINGS
 REPROGRAPHY
 RESEARCH LIBRARIES
 RESEARCH UTILIZATION (INFO.
 DISS. AND UTILIZATION)
 RESOURCE CENTERS
 RESPONSE MODE
 SATELLITES
 SCHOOL LIBRARIES
 SCREENS (DISPLAYS)
 SEARCH STRATEGIES (INFORMATION
 RETRIEVAL)
 SELECTIVE DISSEMINATION OF
 INFORMATION
 SEMIOTICS
 SERIALS
 SIGNS
 SIMULATED ENVIRONMENT
 SIMULATION
 SIMULATORS
 SINGLE CONCEPT FILMS
 SKILL ANALYSIS
 SLIDES
 SMALL GROUP INSTRUCTION
 SOUND EFFECTS
 SOUND FILMS
 SOUND TRACKS
 SPECIAL EFFECTS
 SPECIAL LIBRARIES
 STATE LIBRARIES
 STUDENT DEVELOPED MATERIALS
 SUBJECT INDEX TERMS
 SYSTEM VOCABULARIES
 SYSTEMS ANALYSIS
 SYSTEMS APPROACH
 SYSTEMS CONCEPIS
 SYSTEMS DEVELOPMENT
 TAPE RECORDERES/RECORDINGS
 TASK ANALYSIS
 TAXONOMY (INFORMATION
 PROCESSING AND/OR
 CLASSIFICATION)
 TEACHER DEVELOPED MATERIALS
 TEACHING MACHINES
 TELECOMMUNICATION
 TELECOUSES
 TELEPHONE COMMUNICATION
 SYSTEMS

TELEvised INSTRUCTION
TELEVISION
TELEVISION COMMERCIALS
TELEVISION CURRICULUM
TELEVISION LIGHTING
TELEVISION RESEARCH
TELEVISION SURVEYS
TELEVISION TEACHERS
TELEVISION VIEWING
TENURE (LIBRARIANS)
TERMINOLOGY (LIBRARY AND
INFORMATION SCIENCE)
THESAURI
THREE DIMENSIONAL AIDS
TIME SHARING
TCYS
TRANSPARENCIES
TRUSTEES (LIBRARY)
UNION CATALOGS
UNIVERSITY LIBRARIES
USER SATISFACTION
(INFORMATICA)
USER STUDIES
VIDEC CASSETTE SYSTEMS
VIDEODISC RECORDINGS
VIDEOEQUIPMENT
VIDEOTAPE RECORDINGS
VIEWING TIME
VISUAL ARTS
VISUAL LITERACY
WORK FREQUENCY (EDP: AUTOMATIC
INDEXING)

JUNIOR COLLEGES (JC)

Scope of Interest

Two-year colleges, including public and private community and junior colleges, technical institutes, and branch university campuses, that offer the associate in arts, sciences, or applied sciences as their highest degree. Organization, administration, finance, governance, role and mission, and futures of such institutions; characteristics, needs, and roles of students, faculty, administrators, and trustees of such institutions; staff preparation, development, and evaluation; curricula and programs, (including general education, transfer, occupational, community service, and developmental studies programs); teaching methods; student services; libraries and learning resource centers; community relationships; physical facilities; linkages with business and industry; articulation with secondary schools and four-year institutions; methodologies of research applied to two-year colleges.

Notes

JC's scope of interest overlaps with those of a number of other clearinghouses. Particular documents are considered to be within the scope of JC when their orientation or focus is on the two-year college context. For example, documents dealing with handicapped or minority populations at two-year colleges; counseling services within two-year colleges; vocational or adult education programs at two-year colleges; library services or the use of educational technology at two-year institutions; and the administration of two-year colleges are all considered within the JC scope.

Discipline-related documents (e.g., those dealing with foreign language instruction, reading, social studies, etc.) will generally be transferred to the appropriate subject-oriented clearinghouse, unless the two-year college applications of the materials are especially stressed in the document. Materials dealing with all aspects of postsecondary education, including both two- and four-year colleges, will be processed by JC or transferred to the HE Clearinghouse dependent upon the emphasis of the documents.

Brief Statement

Development, administration, and evaluation of two-year public and private community and junior colleges, technical institutes, and two-year branch university campuses. Two-year college students, faculty, staff, curricula, programs, support services, libraries, and community services. Linkages between two-year colleges and business/industrial organizations. Articulation of two-year colleges with secondary and four-year postsecondary institutions.

JC APPLICABLE TERMS

ACADEMIC ACHIEVEMENT	DEMOGRAPHY
ACADEMIC PERSISTENCE	DEVELOPMENTAL STUDIES PROGRAMS
ACCESS TO EDUCATION	DROPOUT PREVENTION
ACCREDITATION (INSTITUTIONS)	DROPOUT RESEARCH
ADMINISTRATIVE ORGANIZATION	DROPOUTS
ADMINISTRATION ATTITUDES	EDUCATION WORK RELATIONSHIP
ADMINISTRATOR ROLE	EDUCATIONAL FINANCE
ADMINISTRATORS	EDUCATIONAL INNOVATION
ADULT EDUCATION	EDUCATIONAL OBJECTIVES
ADULT STUDENTS	EDUCATIONAL PLANNING
ARTICULATION (EDUCATION)	EDUCATIONAL TELEVISION
ASSOCIATE DEGREES	EMPLOYMENT PROGRAMS
BASIC SKILLS	ENROLLMENT INFLUENCES
BLACK STUDENTS	ENROLLMENT PROJECTIONS
BUDGETS/BUDGETING	ENROLLMENT TRENDS
BUSINESS EDUCATION	EQUAL EDUCATION
CAREER COUNSELING	EVALUATION CRITERIA
COLLECTIVE BARGAINING	EVENING PROGRAMS
COLLEGE ADMINISTRATION	EVENING STUDENTS
COLLEGE ATTENDANCE	FACULTY COLLEGE RELATIONSHIP
COLLEGE SECOND STUDENTS	FACULTY DEVELOPMENT
COLLEGE CREDITS	FACULTY EVALUATION
COLLEGE FACULTY	FACULTY WORKLOAD
COLLEGE FRESHMAN	FEDERAL AID
COLLEGE GOVERNING COUNCILS	FINANCIAL PROBLEMS
COLLEGE INSTRUCTION	FINANCIAL SUPPORT
COLLEGE LIBRARIES	FOLLOWUP STUDIES
COLLEGE PLANNING	FULL TIME FACULTY
COLLEGE PRESIDENTS	FULL TIME STUDENTS
COLLEGE PROGRAMS	GENERAL EDUCATION
COLLEGE POISE	GOVERNANCE
COLLEGE TRANSFER STUDENTS	GOVERNING BOARDS
COMMUNITY COLLEGES	GRADE POINT AVERAGE
COMMUNITY EDUCATION	GRADES (SCHOLASTIC)
COMMUNITY SERVICES	GRADUATE SURVEYS
COMMUTE COLLEGES	HEALTH OCCUPATIONS EDUCATION
COMMUTING STUDENTS	HIGH RISK STUDENTS
COMPARATIVE ANALYSIS	HIGHER EDUCATION
COMPENSATORY EDUCATION	HONORS CURRICULUM
COMPETENCY BASED EDUCATION	HUMANISTIC EDUCATION
COMPUTER ASSISTED INSTRUCTION	HUMANITIES INSTRUCTION
COMPUTER ORIENTED PROGRAMS	INDIVIDUALIZED INSTRUCTION
COOPERATIVE EDUCATION	IN-SERVICE TEACHER EDUCATION
COOPERATIVE PROGRAMS	INSTITUTIONAL RESEARCH
COST EFFECTIVENESS	INSTRUCTIONAL INNOVATION
COURSE CONTENT	INTEGRATED CURRICULUM
COURSE DESCRIPTIONS	INTERCOLLEGIATE COOPERATION
CREDIT COURSES	INTERDISCIPLINARY APPROACH
CURRICULUM DEVELOPMENT	LEARNING LABORATORIES
CURRICULUM GUIDES	LEARNING RESOURCES CENTERS
DAY STUDENTS	LITERAL ARTS
DEGREE REQUIREMENTS	LIFELONG LEARNING.

LITERACY EDUCATION	STUDENT PERSONNEL SERVICES
LONG RANGE PLANNING	STUDENT RECRUITMENT
MAJORS (STUDENTS)	STUDENT TEACHER RELATIONSHIP
MANAGEMENT BY OBJECTIVES	TEACHER ATTITUDES
MASTER PLANS	TEACHER CHARACTERISTICS
MICROGROUPS	TEACHER EVALUATION
MULTICAMPUS COLLEGES	TEACHER PARTICIPATION
MULTICAMPUS DISTRICTS	TEACHER SALARIES
NATIONAL SURVEYS	TEACHING METHODS
NEEDS ASSESSMENT	TECHNICAL EDUCATION
NONCREDIT COURSES	TECHNICAL INSTITUTES
NONTRADITIONAL OCCUPATIONS	TERMINAL STUDENTS
NONTRADITIONAL STUDENTS	TRADE AND INDUSTRIAL EDUCATION
OCUPATIONAL EDUCATION	TRUSTEES
OLDER ADULTS	TUITION
OPEN ENROLLMENT	TUTORIAL PROGRAMS
ORGANIZATIONAL OBJECTIVES	TWO YEAR COLLEGE STUDENTS
PART TIME FACULTY	TWO YEAR COLLEGES
PART TIME STUDENTS	UNDERGRADUATE STUDY
POSTSECONDARY EDUCATION	UNIVERSITIES
PRIVATE COLLEGES	URBAN SCHOOLS
PROGRAM COSTS	VOCATIONAL EDUCATION
PROGRAM DESCRIPTIONS	VOCATIONAL FOLLOWUP
PROGRAM DEVELOPMENT	WHITE STUDENTS
PROGRAM EFFECTIVENESS	WITHDRAWAL (EDUCATION)
PROGRAM IMPLEMENTATION	
PROGRAMMED INSTRUCTION	
REENTRY STUDENTS	
REMEDIAL EDUCATION	
REMEDIAL PROGRAMS	
RETRAINING	
RURAL SCHOOLS	
SCHOOL BUSINESS RELATIONSHIP	
SCHOOL COMMUNITY RELATIONSHIP	
SCHOOL HOLDING POWER	
SCHOOL SURVEYS	
STAFF DEVELOPMENT	
STATE AID	
STATE COLLEGES	
STATE LEGISLATION	
STATE SURVEYS	
STATEWIDE PLANNING	
STUDENT ATTITUDES	
STUDENT ATTRITION	
STUDENT CHARACTERISTICS	
STUDENT COLLEGE RELATIONSHIP	
STUDENT COSTS	
STUDENT EDUCATIONAL OBJECTIVES	
STUDENT EVALUATION	
STUDENT EVALUATION OF TEACHER PERFORMANCE	
STUDENT NEEDS	

ELEMENTARY AND EARLY CHILDHOOD EDUCATION (PS)

Scope of Interest

All aspects of the development and education of children from birth through early adolescence, excluding specific elementary school curriculum areas. Among the topics covered are: Prenatal and infant development and care; child care programs and community services for children at local, state, and federal levels; parent, child, and family relationships; home and school relationships; technology and children; preparation of early childhood personnel; foster care and adoption; theoretical and philosophical issues related to children's development and education.

Specific subjects of interest include; preschool children, elementary school students, early adolescents; parenting, parent education, one-parent families and family life; cognitive, emotional, and physical development of the child, including sensorimotor and psychomotor development; socialization and sex role socialization; language acquisition and development; foster care, adoption, child advocacy, and the effects of public policy on children; day care, family day care, after school and employer-supported day care; private and public preschool and elementary programs; curriculum areas not covered by other clearinghouses, including music, art, and interdisciplinary programs such as Head Start, Follow Through, the Child Development Associate Program, and other similar programs; Montessori, open/informal education; effects of television, microcomputers, and other technology on children and families; education of preschool teachers and preschool and day care staff training.

Notes

The PS Clearinghouse transfers documents dealing with migrant children to the RC Clearinghouse, documents dealing with child abuse to the EC Clearinghouse, and documents dealing with bilingual education to either the FL, RC, or UD Clearinghouse. Documents on preparing early childhood teachers or parents and aides as teachers are processed by PS. PS processes documents on the effects, use, or applications of children's toys; PS transfers to IR those documents on toy libraries and educational games. Parenthood education documents that are primarily adult education-related are transferred to CE.

Brief Statement

The physical, cognitive, social, educational, and cultural development of children from birth through early adolescence; prenatal factors; parental behavior factors; learning theory research and practice related to the development of young children, including the preparation of teachers for this educational level, educational programs and community services for children, and theoretical and philosophical issues pertaining to children's development and education.

PS APPLICABLE TERMS

ACADEMIC ACHIEVEMENT	COMMUNITY SERVICES
ACHIEVEMENT NEED	COMPENSATION (CONCEPT)
ADJUSTMENT TO ENVIRONMENT	COMPENSATORY EDUCATION
ADMINISTRATOR ATTITUDES	CONCEPT FORMATION
ADMISSION (SCHOOL)	CONCEPTUAL TEMPO
ADOPTED CHILDREN	CONSERVATION (CONCEPT)
ADOPTION	CREATIVITY
AFFECTIVE BEHAVIOR	CULTURAL INFLUENCES
AGE DIFFERENCES	CURRICULUM DESIGN
ANXIETY	CURRICULUM DEVELOPMENT
ATTACHMENT BEHAVIOR	CURRICULUM GUIDES
ATTENTION	DAY CARE
AUDITORY DISCRIMINATION	DAY CARE CENTERS
AUDITORY PERCEPTION	DEMOGRAPHY
BASIC SKILLS	DIAGNOSTIC TESTS
BEHAVIOR CHANGE	DISADVANTAGED YOUTH
BEHAVIOR DEVELOPMENT	DISCIPLINE
BEHAVIOR MODIFICATION	DISCOVERY LEARNING
BEHAVIOR PATTERNS	DIVORCE
BEHAVIORAL OBJECTIVES	EARLY ADOLESCENTS
BEHAVIORAL SCIENCE RESEARCH	EARLY CHILDHOOD
BILINGUAL EDUCATION	EARLY CHILDHOOD EDUCATION
BIRTH	EARLY EXPERIENCE
BLACK YOUTH	EDUCATIONAL CHANGE
BREASTFEEDING	EDUCATIONAL INNOVATION
CHILD ADVOCACY	EDUCATIONAL PHILOSOPHY
CHILD CAREGIVERS	EDUCATIONAL POLICY
CHILD DEVELOPMENT	EDUCATIONAL PSYCHOLOGY
CHILD DEVELOPMENT CENTERS	ELEMENTARY EDUCATION
CHILD PSYCHOLOGY	ELEMENTARY SCHOOL STUDENTS
CHILD REARING	EMOTIONAL DEVELOPMENT
CHILD WELFARE	EMPLOYEE SUPPORTED DAY CARE
CHILDHOOD ATTITUDES	ENVIRONMENTAL INFLUENCES
CHILDHOOD NEEDS	ETHNIC GROUPS
CHILDREN	EVALUATION
CHILDREN'S ART	EVALUATION CRITERIA
CHILDREN'S GAMES	EXPERIMENTAL PROGRAMS
CHILDREN'S LITERATURE	FAMILY (SOCIOLOGICAL UNIT)
CHILDREN'S TELEVISION	FAMILY CHARACTERISTICS
CLASS ACTIVITIES	FAMILY DAY CARE
CLASSROOM COMMUNICATION	FAMILY ENVIRONMENT
CLASSROOM ENVIRONMENT	FAMILY INFLUENCE
CLASSROOM OBSERVATION	FAMILY LIFE
TECHNIQUES	FAMILY PROBLEMS
CLASSROOM TECHNIQUES	FAMILY PROGRAMS
COGNITIVE DEVELOPMENT	FATHERS
COGNITIVE PROCESSES	FEDERAL AID
COGNITIVE STYLE	FEDERAL LEGISLATION
COMMUNICATION SKILLS	FEDERAL PROGRAMS
COMMUNITY COOPERATION	FINANCIAL NEEDS -
COMMUNITY RESOURCES	FINANCIAL SUPPORT
	FOLLOW THROUGH

FOSTER CARE
 FOSTER CHILDREN
 FOSTER FAMILY
 GROUP DYNAMICS
 HEAD START
 HOME PROGRAMS
 HOME VISITS
 IDENTIFICATION (PSYCHOLOGICAL)
 INDIVIDUAL CHARACTERISTICS
 INDIVIDUALIZED CURRICULUM
 INDIVIDUALIZED INSTRUCTION
 INDIVIDUALIZED PROGRAMS
 INFANCY
 INFANT BEHAVIOR
 INFANTS
 INNER CITY
 INSERVICE TEACHER EDUCATION
 INSTRUCTIONAL MATERIALS
 INTELLECTUAL DEVELOPMENT
 INTERVENTION
 KINDERGARTEN
 KINDERGARTEN CHILDREN
 LANGUAGE ACQUISITION
 LANGUAGE DEVELOPMENT
 LEARNING ACTIVITIES
 LEARNING PROCESSES
 LEARNING READINESS
 LOCUS OF CONTROL
 LOGICAL THINKING
 LONGITUDINAL STUDIES
 MAINSTREAMING
 MEMORY
 MENTAL DEVELOPMENT
 MINORITY GROUP CHILDREN
 MINORITY GROUPS
 MODELING (PSYCHOLOGICAL)
 MORAL DEVELOPMENT
 MOTHERS
 MENTAL EDUCATION
 MUSIC ACTIVITIES
 NEONATES
 NONPROFESSIONAL PERSONNEL
 NURSERY SCHOOLS
 NUTRITION
 ONE PARENT FAMILY
 OPEN EDUCATION
 OPEN PLAN SCHOOLS
 OPERANT CONDITIONING
 OUTCOMES OF EDUCATION
 PARAPROFESSIONAL SCHOOL
 PERSONNEL
 PARENT AS A TEACHER

PARENT ATTITUDES
 PARENT CHILD RELATIONSHIP
 PARENT EDUCATION
 PARENT INFLUENCE
 PARENT PARTICIPATION
 PARENT RESOURCES
 PARENT SCHOOL COOPERATION
 PARENT SCHOOL RELATIONSHIP
 PARENTHOOD EDUCATION
 PARENTS
 PEER ACCEPTANCE
 PEER GROUPS
 PEER TEACHING
 PERCEPTION
 PERCEPTUAL MOTOR COORDINATION
 PERINATAL INFLUENCES
 PERSONALITY DEVELOPMENT
 PHYSICAL DEVELOPMENT
 PHYSICAL EDUCATION
 PICTORIAL STIMULI
 PLAY
 POSITIVE REINFORCEMENT
 PREGNANCY
 PRENATAL INFLUENCES
 PRESCHOOL CHILDREN
 PRESCHOOL CURRICULUM
 PRESCHOOL EDUCATION
 PRESCHOOL EVALUATION
 PRESCHOOL LEARNING
 PRESCHOOL PROGRAMS
 PRESCHOOL TEACHERS
 PRESCHOOL TESTS
 PRIMARY EDUCATION
 PRIMARY GRADES (1-3)
 PROGRAM DESCRIPTIONS
 PROGRAM DEVELOPMENT
 PROGRAM EFFECTIVENESS
 PROJECT HEAD START
 PSYCHOMOTOR SKILLS
 PUBLIC POLICY
 RACIAL ATTITUDES
 RACIAL DIFFERENCES
 READINESS
 READING ABILITY
 READING ACHIEVEMENT
 REGULAR CLASS PLACEMENT
 REMEDIAL PROGRAMS
 ROLE PLAYING
 SAFETY
 SCHOOL COMMUNITY RELATIONSHIP
 SCHOOL ENTRANCE AGE
 SCHOOL READINESS

SCREENING TESTS
SELF CONCEPT
SEX DIFFERENCES
SEX ROLE
SIBLINGS
SKILL DEVELOPMENT
SOCIAL BEHAVIOR
SOCIAL DEVELOPMENT
SOCIAL REINFORCEMENT
SOCIAL RELATIONS
SOCIALIZATION
SOCIALLY DISADVANTAGED
SOCIOECONOMIC INFLUENCES
SOCIOECONOMIC STATUS
SPECIAL HEALTH PROBLEMS
STAFF IMPROVEMENT
STANDARDS
STATE AID
STATE FEDERAL AID
STATE LEGISLATION
STATE PROGRAMS
STATE STANDARDS
STIMULATION
STRANGER REACTIONS
STUDENT ATTITUDES
STUDENT BEHAVIOR
STUDENT MOTIVATION
STUDENT TEACHER RELATIONSHIP
SUMMER PROGRAMS
TEACHER AIDS
TEACHER ATTITUDES
TEACHER INFLUENCE
TEACHER ROLE
TEACHING METHODS
TEAM TEACHING
TEST RESULTS
TEST VALIDITY
TESTS
TOYS
TUTORING
UNWED MOTHERS
VERBAL ABILITY
VERBAL COMMUNICATION
VERBAL DEVELOPMENT
VISUAL DISCRIMINATION
VISUAL PERCEPTION
VISUALIZATION
VOLUNTEERS
YOUNG CHILDREN

RURAL EDUCATION AND SMALL SCHOOLS (RC)

Scope of Interest

Rural Education—Programs, practices, and materials that provide learning experiences designed to meet the special needs of rural populations. Funding and taxation structures that directly affect learning opportunities in rural communities. Innovative programs, practices, and materials that help to redress curriculum deficiencies brought about by factor of distance and isolation. Practitioner preparation programs designed to enable professionals to function effectively in rural settings. Problems of staff recruitment and retention as they relate to rural schools. The general relationship between education and features of rural life such as the urban to rural migration phenomenon, impacts of energy boom towns, rural development needs, health care and nutrition, vocational training and employment opportunities, etc.

Small Schools—Programs, practices, and materials developed for all schools where conditions of smallness are a factor.

American Indian Education—All programs, practices, and materials that provide learning experiences designed to meet the special needs of American Indian/Alaska Native (Native Americans, Eskimos, Aleuts, and Canada Natives) groups. Materials prepared to help non-Indians know and understand the unique place of American Indians/Alaska Natives in society. Documents on American Indian/Alaska Native languages; particularly as they relate to cultural aspects of language. The general relationship between education and the American Indian/Alaska Native setting, such as reservation life, urban adjustment, health care and nutrition, child adoption and welfare practices, conflicts between traditional views vs. modern culture, etc.

Mexican American Education—All programs, practices, and materials that provide learning experiences designed to meet the special needs of Mexican Americans (Chicanos, Spanish Americans, Hispanos, etc.). Aspects of bilingual education that are culture-based and pertain to Mexican Americans. The general relationship between education and Mexican American life experiences, such as adjustment to their environment, health care and nutrition, welfare practices, conflicts between traditional views vs. modern culture, etc. Some emphasis on the impact on American education of the long open border with Mexico.

Migrant Education—All programs, practices, and materials that provide learning experiences designed to meet the special needs of migrants (those who currently move, or have recently moved, for temporary or seasonal employment). The general relationship between education and migrant life experiences such as stresses of mobility, alienation from main-stream life, health care and nutrition, barriers to achievement, etc.

Outdoor Education—Programs, practices, and materials developed to use nature's resources outdoors as teaching/learning tools (e.g., using moving clouds as subjects for Haiku poetry). Includes resident camping and adventure education programs.

Notes

American Indians/Alaska Natives (Native Americans, Eskimos, Aleuts, and Canada Natives) and Mexican Americans (Chicanos, Spanish Americans, Hispanos) include those living in both rural and urban areas. Documents concerned primarily or exclusively (even if the setting is rural) with Puerto Ricans, Blacks, Asian Americans, and Cubans are transferred to the UD Clearinghouse. The following chart shows the agreed division of ethnic groups coverage between the RC and UD Clearinghouses:

ETHNIC GROUP	LOCATION	
	URBAN/SUBURBAN	RURAL
Blacks	UD	UD
Puerto Ricans	UD	UD
Cubans	UD	UD
Asian Americans	UD	UD
Mexican Americans (Spanish Americans, Chicanos, Hispanos, Mexicans)	RC	RC
American Indians/Alaska Natives (Native Americans, Eskimos, Aleuts, and Canada Natives)	RC	RC
Migrants	RC	RC
All Others	UD	RC

Documents dealing exclusively with environmental aspects of the outdoors are considered to be in the scope of the SE Clearinghouse. Documents dealing exclusively with physical education or recreation are considered to be in the scope of the SP Clearinghouse.

Brief Statement

Economic, cultural, social, or other factors related to educational programs and practices for rural residents; American Indians/Alaska Natives, Mexican Americans, and migrants; educational practices and programs in all small schools; outdoor education.

RC APPLICABLE TERMS

ABORIGINAL PEOPLE	CHICANAS
ACADEMIC ACHIEVEMENT	CHICANO LITERATURE
ACADEMIC ASPIRATION	CHICANO MOVEMENT
ACADEMIC FEEDS	CHICANO STUDIES
ACCESS TO EDUCATION	CHICANOS
ACCULTURATION	CHILD ABUSE
ADJUSTMENT (TO ENVIRONMENT)	CHILD ADVOCACY
ADMINISTRATOR RESPONSIBILITY	CHILD LABOR
ADMINISTRATOR ROLE	CHILD NEGLECT
ADMINISTRATORS	CITIZEN PARTICIPATION
ACTION	CIVIL RIGHTS
ADVENTURE EDUCATION	CLASS SIZE
ADVENTURE LEARNING	CLASSROOM ENVIRONMENT
ADVISORY COMMITTEES	CODE SWITCHING (LANGUAGE)
AFFIRMATIVE ACTION	COGNITIVE DEVELOPMENT
AGENCY COOPERATION	COLLEGE STUDENTS
AGRICULTURAL LABORERS	COMMUNICATION (THOUGHT TRANSFER)
ALASKA NATIVES	COMMUNICATION SKILLS
AMERICANISM	COMMUNITY ACTION
AMERICAN INDIAN ACHIEVEMENT	COMMUNITY ATTITUDES
AMERICAN INDIAN CULTURE	COMMUNITY BASED EDUCATION
AMERICAN INDIAN EDUCATION	COMMUNITY CHANGE
AMERICAN INDIAN HISTORY	COMMUNITY CHARACTERISTICS
AMERICAN INDIAN LANGUAGES	COMMUNITY CONTROL
AMERICAN INDIAN LITERATURE	COMMUNITY DEVELOPMENT
AMERICAN INDIAN RESERVATIONS	COMMUNITY EDUCATION
AMERICAN INDIAN STUDIES	COMMUNITY INVOLVEMENT
AMERICAN INDIANS	COMMUNITY LEADERS
ANCILLARY SCHOOL SERVICES	COMMUNITY RESOURCES
ATHAPASCAN LANGUAGES	COMMUNITY SCHOOLS
BASIC SKILLS	COMPARATIVE ANALYSIS
BEHAVIOR CHANGE	CONSERVATION (ENVIRONMENT)
BELIEFS	CONSOLIDATED SCHOOLS
BICULTURALISM	COOPERATIVE PROGRAMS
BILINGUAL EDUCATION	COPING
BILINGUAL EDUCATION PROGRAMS	CORRESPONDENCE STUDY
BILINGUAL INSTRUCTIONAL MATERIALS	HOST EFFECTIVENESS
BILINGUAL STUDENTS	COUNSELOR CLIENT RELATIONSHIP
BILINGUAL TEACHERS	COURT LITIGATION
BILINGUALISM	CREDIT ACCRUAL
BOARDING SCHOOLS	CROSS CULTURAL STUDIES
BOOMTOWNS	CULTURAL
BRACEROS	CULTURAL ACTIVITIES
BUREAU OF INDIAN AFFAIRS	CULTURAL AWARENESS
CAMPING	CULTURAL BACKGROUND
CANADA NATIVES	CULTURAL CONTEXT
CANCELLING	CULTURAL DIFFERENCES
CAREER GUIDANCE	CULTURAL EDUCATION
CENSUS FIGURES	CULTURAL IMAGES
CEREMONIES	CULTURAL INFLUENCES
CHANGE STRATEGIES	CULTURAL PRESERVATION

CULTURE CONFLICT	ESKIMO ALUTI LANGUAGES
CURRICULUM DEVELOPMENT	ESKIMOS
CURRICULUM ENRICHMENT	ETHNIC GROUPS
DATA COLLECTION	ETHNIC STEREOTYPES
DATA BASES	ETHNICITY
DAY CAMP PROGRAMS	EXCEPTIONAL PERSONS
DECISION MAKING	EXPERIENTIAL LEARNING
DECLINING COMMUNITIES	EXTENDED SCHOOL DAY
DECLINING ENROLLMENT	EXTENSION AGENCIES
DELINQUENCY	EXTENSION EDUCATION
DELINQUENT REHABILITATION	FACULTY MOBILITY
DELIVERY SYSTEMS	FACULTY RECRUITMENT
DEMOGRAPHY	FAMILY ENVIRONMENT
DESEGREGATION EFFECTS	FAMILY INFLUENCE
DEVELOPING NATIONS	FAMILY-SCHOOL RELATIONSHIP
DIAL ACCESS INFORMATION SYSTEMS	FEDERAL INDIAN RELATIONSHIP
DISABILITIES	FEDERAL LEGISLATION
DISCOVERY LEARNING	FEDERAL PROGRAMS
DISTANCE EDUCATION	FEDERAL REGULATION
DROPOUTS	FIELD EXPERIENCE PROGRAMS
ECONOMIC DEVELOPMENT	FIELD INSTRUCTION
ECONOMIC FACTORS	FIELD TRIPS
ECONOMICALLY DISADVANTAGED	FINANCIAL SUPPORT
ECONOMIES OF SCALE	FIRST AID
EDUCATIONAL ASSESSMENT	FISCAL CAPACITY
EDUCATIONAL ATTAINMENT	FLEXIBILITY (TEACHER)
EDUCATIONAL ATTITUDES	FOLK CULTURE
EDUCATIONAL CHANGES	FOREIGN COUNTRIES
EDUCATIONAL DEVELOPMENT	FOSTER HOMES
EDUCATIONAL ENVIRONMENT	FOUR DAY SCHOOL WEEK
EDUCATIONAL FINANCE	FUNDING FORMULAS
EDUCATIONAL GAMES	FUTURES (OF SOCIETY)
EDUCATIONAL HISTORY	GENERALISTS
EDUCATIONAL INNOVATION	GOAL ORIENTATION
EDUCATIONAL LEGISLATION	GOVERNMENT ROLE
EDUCATIONAL NEEDS	HANDICRAFTS
EDUCATIONAL OPPORTUNITIES	HEALTH NEEDS
EDUCATIONAL POLICY	HEALTH SERVICES
EDUCATIONAL QUALITY	HIGH SCHOOLS
EDUCATIONAL RESOURCES	HIKING
EDUCATIONAL STRATEGIES	HISPANIC AMERICAN ACHIEVEMENT
EDUCATIONALLY DISADVANTAGED	HISPANIC AMERICAN CULTURE
ELIGIBILITY	HISPANIC AMERICANS
EMPLOYMENT OPPORTUNITIES	HOLIDAYS
ENGLISH (SECOND LANGUAGE)	ILLEGAL IMMIGRANTS
ENROLLMENT TRENDS	IMMIGRANTS
ENVIRONMENTAL EDUCATION	IMPACT
ENVIRONMENTAL INFLUENCES	IMPACT STUDIES
EQUAL EDUCATION	INDIAN CHILD WELFARE ACT OF 1978
EQUALIZATION AID	INDIAN EDUCATION ACT 1972
ESEA TITLE I MIGRANT PROGRAMS	TITLE IV

INDIGENOUS POPULATIONS	MIGRANT CHILDREN
INDIVIDUAL CHARACTERISTICS	MIGRANT EDUCATION
INDIVIDUALIZED EDUCATION	MIGRANT EMPLOYMENT
PROGRAMS	MIGRANT HEALTH SERVICES
INDIVIDUALIZED INSTRUCTION	MIGRANT HOUSING
INFORMATION SYSTEMS	MIGRANT PROBLEMS
INSERVICE EDUCATION	MIGRANT PROGRAMS
INSERVICE TEACHER EDUCATION	MIGRANT STUDENT RECORD
INSTRUCTIONAL IMPROVEMENT	TRANSFER SYSTEM
INSTRUCTIONAL MATERIALS	MIGRANT TRACKING
INTERACTION PROCESS ANALYSIS	MIGRANT WELFARE SERVICES
INTERCULTURAL PROGRAMS	MIGRANT WORKERS
INTERDISCIPLINARY APPROACH	MIGRANT YOUTH
INTERGROUP RELATIONS	MIGRANTS
INTERNSHIP PROGRAMS	MIGRATION PATTERNS
ISOLATION (GEOGRAPHIC)	MINORITY GROUPS
ISOLATION (PROFESSIONAL)	MODELS
JOHNSON C WILEY ACT	MONOLINGUAL STUDENTS
LABELING (OF PERSONS)	MULTICULTURAL EDUCATION
LANGUAGE ACQUISITION	MULTIPLE ENDORSEMENTS
LANGUAGE AIDS	NATIVE LANGUAGE INSTRUCTION
LANGUAGE ATTITUDES	NATIVE SPEAKERS
LANGUAGE DOMINANCE	NEEDS ASSESSMENT
LANGUAGE EXPERIENCE APPROACH	NONFORMAL EDUCATION
LANGUAGE MAINTENANCE	NONRESERVATION AMERICAN INDIANS
LANGUAGE ROLE	NONTRADITIONAL EDUCATION
LANGUAGE SKILLS	NUTRITION
LANGUAGE USAGE	OCCUPATIONAL ASPIRATION
LATIN AMERICAN HISTORY	OLDER ADULTS
LATINOS	ONE TEACHER SCHOOLS
LAU V NICHOLS	ONLINE SYSTEMS
LAW ENFORCEMENT	OPERATING EXPENSES
LEADERS	ORAL HISTORY
LEARNING ACTIVITIES	OUTCOMES OF EDUCATION
LEGAL AID	OUTDOOR ACTIVITIES
LEGENDS	OUTDOOR EDUCATION
LIFE STYLE	OUTREACH PROGRAMS
LIFELONG LEARNING	OUTWARD BOUND
LIMITED ENGLISH SPEAKING	PARENT ADVISORY COUNCILS
ICCAI GOVERNMENT	PARENT CHILD RELATIONSHIP
LOCAL HISTORY	PARENT PARTICIPATION
LOW INCOME GROUPS	PARENT SCHOOL RELATIONSHIP
MANAGEMENT DEVELOPMENT	PARENT STUDENT RELATIONSHIP
MAP SKILLS	PAROCHIAL SCHOOLS
MATERIAL DEVELOPMENT	PEER RELATIONSHIP
MENTAL HEALTH	PERFORMANCE FACTORS
MEXICAN AMERICAN EDUCATION	PHYSICAL ACTIVITIES
MEXICAN AMERICAN HISTORY	PLANT IDENTIFICATION
MEXICAN AMERICAN LITERATURE	PLAYING AND ACTIVITIES
MEXICAN AMERICANS	POLICY FORMATION
MEXICANS	POLITICAL POWER
MIGRANT ADULT EDUCATION	

POPULATION TRENDS	SCHOOL DISTRICTS
PROPERTY AREAS	SCHOOL LEAVES
POWER STRUCTURE	SCHOOL SIZE
PRIVATE SCHOOLS	SCHOOL YARDS
PROGRAM ADMINISTRATION	SEASONAL EMPLOYMENT
PROGRAM DEVELOPMENT	SEASONAL LABORERS
PROGRAM EFFECTIVENESS	SECOND LANGUAGE LEARNING
PROGRAM EVALUATION	SELF ACTUALIZATION
PROGRAM IMPLEMENTATION	SELF CONCEPT
PROVERBS	SELF DETERMINATION
PUBLIC POLICY	SELF ESTEEM
QUALITY OF LIFE	SELF EVALUATION (INDIVIDUALS)
READING MATERIAL SELECTION	SEX ROLE
READING SKILLS	SHARED SERVICES
RECRUITER ROLE	SKILL DEVELOPMENT
RELEVANCE (CULTURAL)	SMALL SCHOOL DISTRICTS
RELEVANCE (EDUCATION)	SMALL SCHOOLS
RELEVANCE (INFORMATION RETRIEVAL)	SOCIAL CHANGE
RESCUE	SOCIAL HISTORY
RESERVATION AMERICAN INDIANS	SOCIAL INFLUENCES
RESIDENT ASSISTANTS	SOCIAL PROBLEMS
RESIDENT CAMP PROGRAMS	SOCIAL SERVICES
RESOURCE MATERIALS	SOCIAL SUPPORT GROUPS
RISK	SOCIAL WORKERS
RULE PERCEPTION	SOCIOCULTURAL PATTERNS
RURAL AMERICAN INDIANS	SOCIOECONOMIC BACKGROUND
RURAL AREAS	SOCIOECONOMIC STATUS
RURAL CULTURE	SPANISH AMERICANS
RURAL DEVELOPMENT	SPANISH SPEAKING
RURAL ECONOMICS	SPANISH SURNAME
RURAL EDUCATION	SPECIAL EDUCATION
RURAL ENVIRONMENT	STAFF DEVELOPMENT
RURAL EXTENSION	STATE AID
RURAL FAMILY	STATE LEGISLATION
RURAL FARM RESIDENTS	STATE PROGRAMS
RURAL NONFARM RESIDENTS	STATE SCHOOL DISTRICT RELATIONSHIP
RURAL POPULATION	STATE TAXES
RURAL RENAISSANCE	STATE TRIBAL RELATIONSHIP
RURAL RESETTLEMENT	STRESS VARIABLES
RURAL SCHOOLS	STUDENT ADJUSTMENT
RURAL SOCIOLOGY	STUDENT ATTITUDES
RURAL TO URBAN MIGRATION	STUDENT CHARACTERISTICS
RURAL URBAN DIFFERENCES	STUDENT FINANCIAL AID
RURAL WOMEN	STUDENT MOBILITY
RURAL YOUTH	STUDENT RECORDS
SAFETY EDUCATION	STUDENT RECRUITMENT
SCHOOL CLOSING	STUDENT SCHOOL RELATIONSHIP
SCHOOL COMMUNITY RELATIONSHIP	STUDENT TEACHER RELATIONSHIP
SCHOOL DESSEGREGATION	SUMMER PROGRAMS
SCHOOL DISTRICT REORGANIZATION	SUPPLEMENTARY READING
SCHOOL DISTRICT SIZE	MATERIALS

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SURVIVAL EDUCATION
SURVIVAL SKILLS
TEACHER ATTITUDES
TEACHER BEHAVIOR
TEACHER CHARACTERISTICS
TEACHER EDUCATION
TEACHER ROLE
TEACHING METHODS
TERMINATION OF TRIBAL STATUS
TEXTBOOK CONTENT
TEXTBOOK EVALUATION
THISL WORLD
TRAILS
TRANSFER POLICY
TREATIES
TREND ANALYSIS
TRIBAL GOVERNMENT
TRIBAL LAW
TRIBAL MANAGEMENT
TRIBAL SOVEREIGNTY
TRIBALLY CONTROLLED EDUCATION
TRIBALLY CONTROLLED SCHOOLS
TRIBES
TRUST RESPONSIBILITY
(GOVERNMENT)
UNDOCUMENTED STUDENTS
UNDOCUMENTED WORKERS
URBAN AMERICAN INDIANS
URBAN TO RURAL MIGRATION
UTO AZTECAN LANGUAGES
VALUES
VOCATIONAL EDUCATION
WILDERNESS EDUCATION PROGRAMS

SCIENCE, MATHEMATICS AND ENVIRONMENTAL EDUCATION (SE)

Scope of Interest

All levels of science, mathematics, and environmental education; science, mathematics, and environmental teachers and teacher education; applications of learning theories and consideration of learning outcomes in these fields; instructional materials, curriculum guides, and teaching guides related to these fields; descriptions of educational programs, curricula, and activities that emphasize these fields; research and evaluative studies concerned with these fields; computers, computer applications, and computer software related to these fields, at all levels.

Notes

General outdoor education materials are considered within the scope of RC. The social aspects of environmental education are covered by SO. While SE covers environmental education activities in general, a number of special aspects of environmental education are within the scopes of other clearinghouses. SE is working with various groups having science, mathematics, and environmental interests in post-secondary and higher education. These interests include professional and technical courses, programs, materials, and occupations. SE would like to be kept informed of all activities by other clearinghouses in these areas.

Brief Statement

Science, mathematics, and environmental education at all levels, and within these three broad subject areas, the following topics: development of curriculum and instructional materials; teachers and teacher education; learning theory/outcomes (including the impact of parameters such as interest level, intelligence, values, and concept development upon learning in these fields); educational programs; research and evaluative studies; media applications; computer applications.

SE APPLICABLE TERMS

ACADEMIC ACHIEVEMENT (SCIENCE,
MATHEMATICS & ENVIRONMENTAL
EDUCATION)
ACCELERATION (PHYSICS)
ADDITION
ADULT STUDENTS (SCIENCE,
MATHEMATICS & ENVIRONMENTAL
EDUCATION)
AEROSPACE EDUCATION
AEROSPACE TECHNOLOGY
AFFECTIVE OBJECTIVES
AGRICULTURE
AIR POLLUTION CONTROL
ALGEBRA
ALGORITHMS
ANALYTIC GEOMETRY
ANATOMY
ANIMAL BEHAVIOR
ANIMAL FACILITIES
ANIMAL SCIENCE
ANIMALS
ANSWER KEYS
ANXIETY
APTITUDE
APTITUDE TESTS
ARITHMETIC
ARTIFICIAL INTELLIGENCE
ASSOCIATIVE LEARNING
ASTRONOMY
ATOMIC STRUCTURE
ATOMIC THEORY
AUTONARRATIVE AIDS
AUTONARRATIVE LABORATORIES
AUTOINSTRUCTIONAL METHODS
AVIATION EDUCATION
AVIATION MECHANICS
BACK-TO-BASICS MOVEMENT
BEHAVIORAL SCIENCE RESEARCH
BILINGUAL EDUCATION (SCIENCE,
MATHEMATICS & ENVIRONMENTAL
EDUCATION)
BIOCHEMISTRY
BIODEFEAT
BIOLOGICAL INFLUENCES
BIOLOGICAL SCIENCES
BIOLOGY
BIOLOGY INSTRUCTION
BIOMECHANICS
BIOMEDICINE
BIONICS
BIOPHYSICS
BOTANY

BUSINESS MATHEMATICS
CALCULATORS
CALCULUS
CASE STUDIES
CELL THEORY
CHARTS
CHECK LISTS
CHEMICAL ANALYSIS
CHEMICAL BONDING
CHEMICAL ENGINEERING
CHEMICAL EQUILIBRIUM
CHEMICAL NOMENCLATURE
CHEMICAL REACTIONS
CHEMICAL STUDIES
CHEMICAL TECHNICIANS
CHEMISTRY
CHEMISTRY INSTRUCTION
CHEMISTRY TEACHERS
CHROMATOGRAPHY
CITATION INDEXES
CIVIL ENGINEERING
CLASSIFICATION (SCIENCE)
CLASSROOM ENVIRONMENT
CLASSROOM GAMES
CLASSROOM OBSERVATION
TECHNIQUES
CLASSROOM RESEARCH
CLINICAL EXPERIENCE
COAL
COGNITIVE ABILITY
COGNITIVE DEVELOPMENT
COGNITIVE PROCESSES
COGNITIVE STYLE
COGNITIVE TESTS
COLLEGE MATHEMATICS
COLLEGE SCIENCE
COMPUTER ASSISTED INSTRUCTION
COMPUTER GRAPHICS
COMPUTER MANAGED INSTRUCTION
COMPUTER ORIENTED PROGRAMS
COMPUTER SCIENCE
COMPUTER SCIENCE EDUCATION
COMPUTER TECHNOLOGY
COMPUTERS
CONCEPT DEVELOPMENT (SCIENCE,
MATHEMATICS & ENVIRONMENTAL
EDUCATION)
CONCEPT FORMATION
CONCEPTUAL SCHEMES
CONCEPTUAL TEMPO
CONGRUENCE
CONGRUENCE (MATHEMATICS)

CONSERVATION (CONCEPT)	DOGMATISM
CONSERVATION (ENVIRONMENT)	DRINKING WATER
CONSERVATION EDUCATION	DRUG ABUSE
CONSUMER MATHEMATICS	EARTH SCIENCES
COURSE EVALUATION	ECOLOGICAL FACTORS
CREATION	ECOLOGY
CREATIVITY	ECONOMICS (GENERAL)
CRITERION REFERENCED TESTS	EDUCATIONAL GAMES
CRITICAL READING	EDUCATIONAL INNOVATION
CRITICAL THINKING	(SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)
CROSS AGE TEACHING	EDUCATIONAL RESEARCH
CRYSTALLIZATION	EDUCATIONAL TECHNOLOGY
CULTURAL FACETS	EFFECTIVE TEACHING (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)
CURRICULUM DESIGN (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRIC BATTERIES
CURRICULUM DEVELOPMENT (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRIC CIRCUITS
CURRICULUM DEVELOPMENT (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRIC MOTORS
CURRICULUM EVALUATION (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRICAL CIRCUITS
CURRICULUM GUIDES (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRICITY
CURRICULUM PLANNING (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	ELECTRONIC EQUIPMENT
CYBERNETICS	ELECTRONIC INDUSTRY
CYTOLGY	ELECTRONICS
DECIMAL FRACTIONS	ELEMENTARY SCHOOL MATHEMATICS
DECISION MAKING	ELEMENTARY SCHOOL SCIENCE
DEDUCTION	EMBRYOLOGY
DEDUCTIVE METHODS	ENERGY
DEVELOPMENTAL STAGES	ENERGY CONSERVATION
DIAGNOSTIC TEACHING	ENERGY OCCUPATIONS
DIAGNOSTIC TESTS	ENGINEERING (GENERAL)
DIAGRAMS	ENGINEERING DRAWING
DIFFERENTIATED STAFFS	ENGINEERING EDUCATION
DIFFUSION (PHYSICS)	ENGINEERING TECHNICIANS
DISCOVERY LEARNING	ENGINES
DISCRIMINANT ANALYSIS	ENVIRONMENT
DISCUSSION (TEACHING TECHNIQUES)	ENVIRONMENTAL EDUCATION
DIVERGENT THINKING	ENVIRONMENTAL INFLUENCES
DIVISION	ENVIRONMENTAL RESEARCH
DNA	ENVIRONMENTAL STANDARDS
DOCTORAL THESES	ENVIRONMENTAL TECHNICIANS
DOCTORS DEGREES	ENZYMES
	EQUATIONS (MATHEMATICS)
	EQUIPMENT (SCIENCE & MATHEMATICS)
	ESTIMATION (MATHEMATICS)
	ETHNOLOGY
	EVALUATION
	EVALUATION CRITERIA
	EVALUATION METHODS
	EVALUATIVE THINKING

EVOLUTION
 EXPERIMENTS
 FACILITIES (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 FEDERAL AID (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 FEDERAL LEGISLATION (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 FEDERAL PROGRAMS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 FIELD EXPERIENCE PROGRAMS
 FIELD INSTRUCTION
 FIELD STUDIES
 FIELD TRIPS
 FIRST AID (HEALTH EDUCATION)
 FLOW CHARTS
 FLUID MECHANICS
 FLUORIDATION
 FOREST C
 FORESTRY
 FRACTIONS
 FUELS
 FUNCTIONS (MATHEMATICS)
 FUTURES (OF SOCIETY)
 FUTURISM
 GAMES
 GENERAL SCIENCE
 GENETIC ENGINEERING
 GENETICS
 GEOLOGY
 GEOMETRIC CONCEPTS
 GEOMETRIC CONSTRUCTION
 GEOMETRY
 GEOPHYSICS
 GIFTED
 GLOBAL EDUCATION
 GRADUATE STUDENTS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 GRAPHS
 GRAVITY (PHYSICS)
 HANDICAPPED STUDENTS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 HIGH ACHIEVERS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 HORTICULTURE

ICETOLOGY
 ILLUSTRATIONS
 INDIVIDUALIZED CURRICULUM
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INDIVIDUALIZED INSTRUCTION
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INDIVIDUALIZED PROGRAMS
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INDUCTION
 INDUCTIVE METHODS
 INEQUALITIES
 INEQUALITY (MATHEMATICS)
 INFORMATION SPECIALISTS
 INORGANIC CHEMISTRY
 INQUIRY TRAINING
 INSECTICIDES
 INSERVICE TEACHER EDUCATION
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INSTRUCTIONAL IMPROVEMENT
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INSTRUCTIONAL INNOVATION
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INSTRUCTIONAL MATERIALS
 (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 INTEGERS
 INTEGRATED CURRICULUM
 INTELLECTUAL DEVELOPMENT
 INTERACTION PROCESS ANALYSIS
 INTERDISCIPLINARY APPROACH
 ITEM ANALYSIS
 KINETICS
 LABORATORIES
 LABORATORY ANIMALS
 LABORATORY EQUIPMENT
 LABORATORY EXPERIMENTS
 LABORATORY MANUALS
 LABORATORY PROCEDURES
 LABORATORY SAFETY
 LABORATORY TECHNIQUES
 LABORATORY TRAINING
 LAND USE
 LASERS
 LATERAL DOMINANCE
 LEARNING
 LEARNING (SCIENCE, MATHEMATICS
 & ENVIRONMENTAL EDUCATION)

LEARNING ACTIVITIES	MICROSCOPES
LEARNING DIFFICULTIES	MOBILE LABORATORIES
LEARNING DISABILITIES	MODELS
LEARNING PROCESSES	MODERN MATHEMATICS
LEARNING TECHNIQUES	MULTIPLICATION
LIGHT	MUSEUMS
LINEAR PROGRAMMING	NATIONAL SURVEYS
LITTER	NATURAL RESOURCES
LOCUS OF CONTROL	NATURAL SCIENCES
LOGIC	NATURE CENTERS
LOGICAL THINKING	NEEDS ASSESSMENT
LONGITUDINAL STUDIES	NETWORKS
LOW ABILITY STUDENTS (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	NEW MATH
LUMINESCENCE	NOISE (SOUND)
LUNAR RESEARCH	NONFORMAL EDUCATION
MAGNETS	NUCLEAR PHYSICS
MAGNIFICATION METHODS	NUCLEAR POWER PLANT TECHNOLOGY
MANIPULATIVE MATERIALS	NUCLEAR POWER PLANTS
MANUFACTURED NEEDS	NUCLEAR TECHNICIANS
MARINE BIOLOGY	NUCLEAR WARFARE
MASTERS DEGREES	NUCLEIC ACIDS
MASTER LEARNING	NUMBER CONCEPTS
MASTER TESTS	NUMBER SYSTEMS
MATHEMATICAL APPLICATIONS	NUMBERS
MATHEMATICAL CONCEPTS	OBJECTIVE TESTS
MATHEMATICAL ENRICHMENT	OBSERVATION
MATHEMATICAL EXPERIENCE	OCEANOGRAPHY
MATHEMATICAL LOGIC	OCEANOLOGY
MATHEMATICAL MODELS	OUTDOOR EDUCATION
MATHEMATICAL VOCABULARY	OVERPOPULATION
MATHEMATICIANS	PALEONTOLOGY
MATHEMATICS	PERCENTAGE
MATHEMATICS CURRICULUM	PESTICIDES
MATHEMATICS	PHYSICAL SCIENCES
EDUCATION/INSTRUCTION	PHYSICS
MATHEMATICS FORMULAS	PHYSICS CURRICULUM
MATHEMATICS LINGUISTICS	PHYSICS EXPERIMENTS
MATHEMATICS MATERIALS	PHYSICS INSTRUCTION
MATHEMATICS TEACHER EDUCATION	PHYSICS TEACHERS
MATHEMATICS TEACHERS	PHYSIOLOGY
MEASUREMENT (MATHEMATICS)	PLANE GEOMETRY
MEASUREMENT (SCIENCE)	PLANT GROWTH
MEASUREMENT TECHNIQUES	PLANT IDENTIFICATION
MEDIA	PLANT PATHOLOGY
MEDICAL EDUCATION	PLANT SCIENCE
METALS	POISONS
METEOROLOGY	POLLUTION
METRIC SYSTEM	POPULATION EDUCATION (SCIENCE & ENVIRONMENTAL EDUCATION)
MICROBIOLOGY	POPULATION GROWTH
MICROCOMPUTERS	POSTSECONDARY EDUCATION (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)

POTENTIOMETERS (INSTRUMENTS)	SCIENCE COURSES
POWER TECHNOLOGY	SCIENCE CURRICULUM
PRACTICAL MATHEMATICS	SCIENCE DEPARTMENTS
PREDICTION	SCIENCE EDUCATION
PRESCHOOL EDUCATION (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	SCIENCE EDUCATION HISTORY
PRIME NUMBERS	SCIENCE EQUIPMENT
PROBABILITY	SCIENCE EXPERIMENTS
PROBABILITY THEORY	SCIENCE FACILITIES
PROBLEM SETS	SCIENCE FAIRS
PROBLEM SOLVING	SCIENCE HISTORY
PROGRAM DESCRIPTIONS (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	SCIENCE INSTITUTES
PROGRAMMED INSTRUCTION	SCIENCE INSTRUCTION
PROGRAMMED MATERIALS	SCIENCE LABORATORIES
PROGRAMMING	SCIENCE MATERIALS
QUANTITATIVE TESIS	SCIENCE PROGRAMS
QUANTUM MECHANICS	SCIENCE PROJECTS
QUESTIONING TECHNIQUES	SCIENCE SUPERVISION
RADAR	SCIENCE TEACHER EDUCATION
RADIATION	SCIENCE TEACHERS
RADIATION BIOLOGY	SCIENCE TEACHING CENTERS
RADIATION EFFECTS	SCIENCE TESTS
RADIOISOTOPES	SCIENCE UNITS
RATIONAL NUMBERS	SCIENTIFIC ATTITUDES
RATIOS (MATHEMATICS)	SCIENTIFIC CONCEPTS
READABILITY FORMULAS	SCIENTIFIC ENTERPRISE
RECIPROCALS (MATHEMATICS)	SCIENTIFIC LITERACY
RELATIONSHIP	SCIENTIFIC MANPOWER
REMEDIAL ARITHMETIC	SCIENTIFIC METHODOLOGY
REMEDIAL MATHEMATICS	SCIENTIFIC PERSONNEL
RESEARCH	SCIENTIFIC PRINCIPLES
RESEARCH (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)	SCIENTIFIC RESEARCH
RESEARCH METHODOLOGY	SCIENTISTS
RESEARCH NEEDS	SECONDARY SCHOOL MATHEMATICS
RESEARCH REVIEW (PUBLICATIONS)	SECONDARY SCHOOL SCIENCE
RNA	SEX THEORY
SAFETY	SEX DIFFERENCES
SAFETY EDUCATION	SEX DISCRIMINATION (SCIENCE AND MATHEMATICS)
SANITARY FACILITIES	SEX ROLE
SANITATION	SEX STEREOTYPES
SATELLITES (AEROSPACE)	SIMULATION
SCHEMATA (COGNITION)	SITE ANALYSIS
SCIENCE ACTIVITIES	SITE DEVELOPMENT
SCIENCE CAFETERIAS	SLOW LEARNERS (SCIENCE, MATHEMATICS & ENVIRONMENTAL EDUCATION)
SCIENCE CLUBS	SOCIAL INFLUENCES
SCIENCE CONSULTANTS	SOIL CONSERVATION
SCIENCE COURSE IMPROVEMENT	SOIL SCIENCE
PROJECT	SOLAR ENERGY
	SOLID GEOMETRY
	SOLID WASTES

SPACE EXPLORATION
 SPACE SCIENCE
 STATISTICS
 STATISTICS (MATHEMATICS)
 STUDENT SCIENCE INTERESTS
 SUBTRACTION
 SUMMER SCIENCE PROGRAMS
 SYMCELS (MATHEMATICS)
 SYMMETRY
 TAXONOMY
 TEACHER EDUCATION (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TEACHER SUPPLY AND DEMAND
 TEACHING METHODS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TEACHING MODELS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TEACHING SKILLS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TEACHING TECHNIQUES (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TECHNICAL EDUCATION (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TECHNOLOGICAL ADVANCEMENT
 TECHNOLOGICAL LITERACY
 TECHNOLOGY
 TECHNOLOGY TRANSFER
 TESTS (SCIENCE, MATHEMATICS &
 ENVIRONMENTAL EDUCATION)
 TEXTBOOKS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 THERMODYNAMICS
 THOUGHT PROCESSES
 TOPOGRAPHY
 TOXIC SUBSTANCES
 TOXICOLOGY
 TRAILS
 TRANSFORMATIONS (MATHEMATICS)
 TREES
 TRIGONOMETRY
 TUTORIAL PROGRAMS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 TUTORING (SCIENCE, MATHEMATICS
 & ENVIRONMENTAL EDUCATION)

UNDERACHIEVERS (SCIENCE,
 MATHEMATICS & ENVIRONMENTAL
 EDUCATION)
 VISUAL PERCEPTION
 WASTE DISPOSAL
 WASTES
 WASTEWATER
 WASTEWATER TREATMENT EDUCATION
 WATER POLLUTION CONTROL
 WATER QUALITY
 WATER RESOURCES
 WATER TREATMENT
 WEATHER
 WEEDS
 WHOLE NUMBERS
 WILDERNESS
 WILDLIFE
 WILDLIFE MANAGEMENT
 WORKSHEETS
 ZOOLOGY
 ZOOS

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION (SO)

Scope of Interest

All levels of social studies and social science education; social studies teachers; content of the social science disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory to social science education; research and development projects, programs, and materials in social science education; the contributions of social science disciplines (anthropology, economics, geography, history, sociology, social psychology, psychology, political science) to knowledge and understanding of the educational process; education as a social science; comparative education (K-12); social studies content and curriculum materials on such subjects as law-related education, ethnic heritage studies, bias and discrimination, aging, adoption, women's equity, and sex education. Documents in the humanities, including music, dance, and art education, are received and processed, but not actively sought.

Notes

Documents concerned with comparative education in general, as well as at the K-12 level, are processed by SO. Documents concerned with comparative education at the higher education level are processed by the HE Clearinghouse.

Brief Statement

All levels of social studies and social science education; content of the social science disciplines; applications of theory and research to social science education; contributions of social science disciplines (anthropology, economics, geography, history, sociology, social psychology, political science); education as a social science; comparative education (K-12); content and curriculum materials on "social" topics such as law-related education, ethnic studies, bias and discrimination, aging, adoption, women's equity, and sex education.

SO APPLICABLE TERMS

ABORTIONS (CURRICULUM RELATED SOCIAL CONCERNS)	CONSERVATION EDUCATION
ACADEMIC ACHIEVEMENT	CONSTITUTIONAL HISTORY
ACTIVISM	CONSTITUTIONAL LAW
ADJUSTMENT (IN ENVIRONMENT)	CONSUMER ECONOMICS
AFFECTIVE BEHAVIOR	CONSUMER EDUCATION (AS PART OF SOCIAL STUDIES)
AFFECTIVE OBJECTIVES	COURT LITIGATION
AFFIRMATIVE ACTION	CREATIVE THINKING
AFRICAN AMERICAN STUDIES	CRIME
AGING (CURRICULUM RELATED SOCIAL CONCERN)	CRITICAL THINKING
ALCOHOLISM (SOCIAL PROBLEM)	CROSS CULTURAL STUDIES
AMERICAN GOVERNMENT	CROSS CULTURAL TRAINING (CULTURAL AWARENESS)
AMERICAN STUDIES	CULTURAL AWARENESS
ANDROGYNY	CULTURAL BACKGROUND
ANTHROPOLOGY	CULTURAL CONTEXT
ARCHAEOLOGY	CULTURAL DIFFERENCES
AREA STUDIES	CULTURAL EDUCATION
ART	CULTURAL EXCHANGE
ART EDUCATION	CULTURAL FAVORITES
ASIAN STUDIES	CULTURAL IMAGES
AUTHORITARIANISM	CULTURAL PLURALISM
BASIC SKILLS (SOCIAL STUDIES)	CULTURALLY DISADVANTAGED
BEHAVIOR CHANGE	CULTURE CONFLICT
BEHAVIORISTICS	CURRENT EVENTS
BEHAVIORAL SCIENCE RESEARCH	CURRICULUM DESIGN (THEORY)
BEHAVIORAL SCIENCES	CURRICULUM DEVELOPMENT (THEORY)
BLACK STUDIES	CURRICULUM EVALUATION (SOCIAL STUDIES)
CASE STUDIES (RELATING TO THE SOCIAL SCIENCES)	CURRICULUM GUIDES (SOCIAL STUDIES)
CENSORSHIP	DEATH (CURRICULUM RELATED SOCIAL CONCERN)
CHANGE STRATEGIES (SOCIAL STUDIES)	DEATH EDUCATION (CURRICULUM RELATED SOCIAL CONCERN)
CHANGING ATTITUDES	DECISION MAKING
CHILD DEVELOPMENT (AS PART OF PSYCHOLOGY)	DEDUCTIVE METHODS (SOCIAL STUDIES)
CHILD PSYCHOLOGY	DEMOCRATIC VALUES
CITIZEN PARTICIPATION	DEMOGRAPHY
CITIZENSHIP	DEVELOPED NATIONS
CIVICS	DEVELOPING NATIONS
CIVIL LIBERTIES	DISCOVERY LEARNING
CIVIL RIGHTS	DISCRIMINATORY ATTITUDES (SOCIAL)
CLASSROOM GAMES (SOCIAL STUDIES)	DISCUSSION (TEACHING TECHNIQUE)
COMMUNISM	DISSENT
COMMUNITY ACTION	DIVORCE (SOCIAL PROBLEM)
COMMUNITY RESOURCES	DRUG ABUSE (SOCIAL PROBLEM)
COMMUNITY STUDIES	DUE PROCESS
COMPARATIVE EDUCATION	
COMPUTER ASSISTED INSTRUCTION (SOCIAL STUDIES)	
CONFLICT RESOLUTION	

ECONOMIC FACTS	GOVERNMENT
ECONOMICS (GENERAL) (AS PART	GROUP RELATIONS
OF SOCIAL STUDIES)	HISTORY
ECONOMICS EDUCATION	HISTORY INSTRUCTION
EDUCATION	HUMAN RELATIONS
EDUCATIONAL ALTERNATIVES	HUMAN RELATIONS PROGRAMS
EDUCATIONAL CHANGE	HUMAN RELATIONS UNITS
EDUCATIONAL ECONOMICS	HUMAN RIGHTS
EDUCATIONAL GAMES (SOCIAL	HUMAN SERVICES (SOCIAL
STUDIES)	WELFARE)
EDUCATIONAL HISTORY	HUMANISM
EDUCATIONAL IMPROVEMENT	HUMANITIES (ART, MUSIC,
EDUCATIONAL INNOVATION	CULTURAL STUDIES)
EDUCATIONAL OBJECTIVES	HUMANITIES INSTRUCTION (ART,
EDUCATIONAL PHILOSOPHY	MUSIC, CULTURAL STUDIES)
EDUCATIONAL PSYCHOLOGY	HUMANIZATION
EDUCATIONAL RESEARCH	INDIAN HISTORY
EDUCATIONAL SOCIOLOGY	INDIVIDUALIZED INSTRUCTION
EDUCATIONAL THEORY	(THEORY)
EFFECTIVE TEACHING (SOCIAL	INDIVIDUALIZED PROGRAMS
STUDIES)	(THEORY)
ENERGY	INDUCTIVE METHODS (SOCIAL
ENERGY CONSERVATION (SOCIAL	STUDIES)
STUDIES)	INQUIRY TRAINING
ENVIRONMENTAL EDUCATION (AS	INSTRUCTIONAL INNOVATION
PART OF SOCIAL STUDIES)	(SOCIAL STUDIES)
ETHICAL INSTRUCTION	INTELLECTUAL DEVELOPMENT
ETHNIC GROUPS	INTELLECTUAL DISCIPLINES
ETHNIC MINORITIES	(SOCIAL SCIENCES)
ETHNIC CRIMES	INTELLECTUAL PERFORMANCE
ETHNIC RELATIONS	INTERACTION PROCESS ANALYSIS
ETHNIC STEREOTYPES	(BEHAVIORAL SCIENCES)
ETHNIC STUDIES	INTERCULTURAL PROGRAMS
ETHNOLOGY	INTERDISCIPLINARY APPROACH
FAMILY (SOCIOLOGICAL UNIT)	INTERFAITH RELATIONS
FAMILY CHARACTERISTICS	INTERGROUP EDUCATION
FAMILY ENVIRONMENT	INTERGROUP RELATIONS (HUMAN
FAMILY LIFE EDUCATION	RELATIONS)
FEMALES	INTERNATIONAL EDUCATION
FEMINISM	LABOR PROBLEMS
FOREIGN CULTURE	LAW ENFORCEMENT
FOREIGN RELATIONS	LAW INSTRUCTION
FOUNDATIONS OF EDUCATION	LEADERSHIP RESPONSIBILITY
FUTURES (OF SOCIETY)	LEADERSHIP TRAINING
FUTURISM	(COMMUNITY)
GAME THEORY (SOCIAL STUDIES)	LEARNING
GAMES (SOCIAL STUDIES)	LEARNING ACTIVITIES (SOCIAL
GEOGRAPHIC REGIONS	STUDIES)
GEOPGRAPHY	LEARNING MOTIVATION
GEOPGRAPHY INSTRUCTION	LEARNING PROCESSES
GENETICLOGY (SOCIAL PROBLEM)	LEARNING THEORIES
GLOBAL EDUCATION	LEGAL EDUCATION

IEGAI PROBLEMS	RACIAL ATTITUDES
LEISURE TIME	RACIAL DIFFERENCES
LCAL HISTORY	RACIAL DISCRIMINATION
LCGICAL THINKING	RACIAL FACTORS
MARRIAGE	REINFORCEMENT (PSYCHOLOGY)
MENTAL DEVELOPMENT	RELEVANCE (EDUCATION)
MEXICAN AMERICAN HISTORY	RELIGIOUS EDUCATION
MIDDLE EASTERN STUDIES	RESEARCH
MINORITY GROUPS	RESEARCH METHODOLOGY
PCDEIS (THEORY)	RESEARCH REVIEW (PUBLICATIONS)
MORAL DEVELOPMENT	ROLE CONFLICT
MOTIVATION (ENVIRONMENT)	ROLE PERCEPTION
MOTIVATION TECHNIQUES	ROLE THEORY
MUSEUMS	SELF ACTUALIZATION
MUSIC	SELF CONCEPT
MUSIC EDUCATION	SENSITIVITY TRAINING
MON-WESTERN CIVILIZATION	SEX BIAS
OBJECTIVES	SEX DIFFERENCES (SOCIAL PROBLEM)
OPAL HISTORY	SEX DISCRIMINATION
ORGANIZATIONAL CLIMATE (BEHAVIORAL SCIENCES)	SEX EDUCATION (CURRICULUM RELATED SOCIAL CONCERN)
OVERREGULATION	SEX FAIENESS
PARENT ATTITUDES	SEX ROLE
PEACE	SEX STEREOTYPES
PERCEPTION (PSYCHOLOGY)	SEXUALITY
PERCEPTUAL DEVELOPMENT (PSYCHOLOGY)	SIMULATION (SOCIAL STUDIES)
PERCEPTUAL MOTIVE COORDINATION (PSYCHOLOGY)	SKILL DEVELOPMENT
PERSONALITY	SOCIAL ACTION
PERSONALITY DEVELOPMENT	SOCIAL ATTITUDES
PHILOSOPHY	SOCIAL BEHAVIOR
POLITICAL AFFILIATION	SOCIAL CHANGE
POLITICAL INFLUENCES	SOCIAL DEVELOPMENT
POLITICAL ISSUES	SOCIAL INFLUENCES
POLITICAL POWER	SOCIAL PLANNING
POLITICAL SCIENCE	SOCIAL PROBLEMS
POLITICAL SOCIALIZATION	SOCIAL PSYCHOLOGY
POLITION	SOCIAL RELATIONS
POPULATION EDUCATION (SOCIAL STUDIES)	SOCIAL SCIENCE RESEARCH
POPULATION GROWTH	SOCIAL SCIENCES
POPULATION TRENDS	SOCIAL STRATIFICATION
POWER STRUCTURE	SOCIAL STUDIES
PROBLEM SOLVING	SOCIAL STUDIES TEACHERS
PSYCHOLOGICAL CHARACTERISTICS	SOCIAL STUDIES UNITS
PSYCHOLOGY (AS A SOCIAL SCIENCE)	SOCIAL SYSTEMS
PSYCHOLOGY OF LEARNING	SOCIAL VALUES
PUBLIC AFFAIRS EDUCATION	SOCIAL WELFARE
QUALITY OF LIFE	SOCIAL WORKERS
RACE RELATIONS	SOCIALIZATION
	SOCIALLY DEVIANT BEHAVIOR
	SOCIALLY DISADVANTAGED
	SOCIOECONOMIC BACKGROUND

SOCIOECONOMIC INFLUENCES
SOCIOECONOMIC STATUS
SOCIOLOGY
STATE GOVERNMENT (SOCIAL STUDIES)
STATE HISTORY
STATE LAWS
STATE LEGISLATION
STEREOTYPES
STUDENT ALIENATION
STUDENT ATTITUDES
STUDENT BEHAVIOR
STUDENT CHARACTERISTICS
STUDENT PARTICIPATION
STUDENT RIGHTS
STUDENT ROLE
STUDENT SUBCULTURES
STUDENT TEACHER RELATIONSHIP
SYSTEMS ANALYSIS
SYSTEMS APPROACH
TEACHER EDUCATION (SOCIAL STUDIES)
TEACHING (SOCIAL STUDIES)
TEACHING METHODS (THEORY)
(SOCIAL STUDIES)
TEACHING MODELS (SOCIAL STUDIES)
TRANSFER OF TRAINING
(PSYCHOLOGY)
UNITED STATES HISTORY
URBAN STUDIES
URBANIZATION
VALUES
VISUAL AIDS
VISUAL DISCRIMINATION
(PSYCHOLOGY)
VISUAL PERCEPTION (PSYCHOLOGY)
WAR
WOMENS EDUCATION
WOMENS STUDIES
WORLD AFFAIRS
WORLD HISTORY
WORLD PROBLEMS
YOUTH
YOUTH PROGRAMS

TEACHER EDUCATION (SP)

Scope of Interest

Preservice and inservice education and continuing professional development of teachers and other instructional personnel; development of teacher education faculty for schools, colleges, and departments of education; teacher selection, training, licensing, and retirement; the theory, philosophy, and practice of teaching; and curriculum development in those areas not specifically covered by other, subject-oriented Clearinghouses. Emphasis is on the teaching-learning process and the skills, knowledge, behavior, and attitudes of the participants which further the teaching-learning process. The scope encompasses such topics as research on teacher education and the organization, administration, governance, financing, evaluation, and legal aspects of teacher education and the examination of them in such settings as institutions of higher education, state education agencies, local education agencies, teacher centers, individual schools, business and non-school settings, etc.

Health education; physical education, including movement education; the sports disciplines; recreation education; nutrition education; and dance education when the emphasis is on movement and physical education (as opposed to fine arts aspects).

Notes

Documents which focus on specific skills, knowledge, behavior, and attitudes integrally related to particular subject matters, as well as teacher education curriculum materials which concentrate on the content area to be taught (e.g., a foreign language, social studies, mathematics, etc.), are processed by the appropriate discipline oriented clearinghouses. The topic of teacher evaluation is generally handled by EA, if the implications are related to administrative functions, programs, and/or personnel. Teacher evaluation documents that concern teacher attitudes or effects on teacher preparation are handled by SP.

Brief Statement

School personnel at all levels; teacher selection and training, preservice and inservice preparation, and retirement; the theory, philosophy, and practice of teaching; curricula and general education not specifically covered by other Clearinghouses; all aspects of physical education, health education, and recreation education.

SP APPLICABLE TERMS

ACCREDITATION (INSTITUTIONS)	EDUCATION (GENERAL)
ADMINISTRATOR ATTITUDES	EDUCATION COURSES
AFFECTIVE BEHAVIOR	EDUCATION MAJORS
AFFECTIVE OBJECTIVES	EDUCATIONAL ACCOUNTABILITY
AFFILIATED SCHOOLS	EDUCATIONAL CHANGE
AIDES (TEACHER)	(INNOVATIONS)
ATHLETES	EDUCATIONAL IMPROVEMENT (NEW PROGRAMS)
ATHLETIC ACTIVITIES	EDUCATIONAL INNOVATION
BEGINNING TEACHERS	EDUCATIONAL NEEDS
BEHAVIOR CHANGE (BEHAVIOR MODIFICATION)	EDUCATIONAL PHILOSOPHY
BEHAVIOR PATTERNS	EDUCATIONAL PLANNING
BEHAVIORAL OBJECTIVES	EDUCATIONAL RESEARCH
CODE OF EDUCATION POLICY/ROLE	EDUCATIONAL RESOURCES (TEACHING RESOURCES)
CERTIFICATION (TEACHER CERTIFICATION)	EDUCATIONAL STRATEGIES
CHANGE AGENTS	EDUCATIONAL THEORY
CHANGING ATTITUDES	EDUCATORS (GENERAL)
CLASS ACTIVITIES	EFFECTIVE TEACHING
CLASSROOM ENVIRONMENT	ELEMENTARY SCHOOL TEACHERS
CLASSROOM OBSERVATION TECHNIQUES	EVALUATION CRITERIA
CLASSROOM TECHNIQUES	EVALUATION METHODS, PROCEDURES, TECHNIQUES
CLINICAL PROFESSORS	EXERCISE PHYSIOLOGY
COLLEGE COMMUNITY RELATIONSHIPS	EXPERIMENTAL TEACHING
COLLEGE SCHOOL COOPERATION	FACULTY
COLLEGE SUPERVISORS	FACULTY DEVELOPMENT
COMMUNITY FEELING	FIELD EXPERIENCE PROGRAMS
COMMUNITY RESCUE VOLUNTEERS	FIRST AID (HEALTH EDUCATION)
COMMUNITY SCHOOL RELATIONSHIP	FOUNDATIONS OF EDUCATION
COOPERATING TEACHERS	GRADES
CREATIVE TEACHING	GRADING
CROSS AGE TEACHING	HEALTH EDUCATION
CROSS CULTURAL TRAINING	HYGIENE (HEALTH EDUCATION)
CURRICULUM	IMMUNIZATION PROGRAMS
CURRICULUM DESIGN	INDIVIDUAL INSTRUCTION
CURRICULUM DEVELOPMENT	INDIVIDUALIZED CURRICULUM (TEACHING)
CURRICULUM GUIDES	INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
CURRICULUM STUDY CENTERS	INDIVIDUALIZED PROGRAMS (TEACHING)
DANCE (PHYSICAL EDUCATION)	INNOVATIONS IN EDUCATION (RESEARCH)
DANCE EDUCATION	INNOVATIVE INSTRUCTIONAL PRACTICES
DEATH EDUCATION (HEALTH EDUCATION CURRICULUM)	INQUIRY TRAINING
DENTAL HEALTH	INSERVICE TEACHER EDUCATION
DIFFERENTIATED STAFFS	INSTITUTES (TRAINING PROGRAMS)
DISCIPLINE	INSTITUTIONAL ROLE
DISCOVERY LEARNING	INSTRUCTION
DISCUSSION (TEACHING TECHNIQUE)	
DRUG EDUCATION (HEALTH EDUCATION CURRICULUM)	

INSTRUCTIONAL DEVELOPMENT	PHYSICAL EDUCATION
INSTRUCTIONAL IMPROVEMENT	PHYSICAL EDUCATION (ALL
INSTRUCTIONAL INNOVATION	GRADES)
INSTRUCTIONAL MATERIALS	PHYSICAL EDUCATION TEACHERS
(TEACHING MATERIALS)	PHYSICAL FITNESS
INSTRUCTIONAL STAFF (GENERAL)	PLAY
INSTRUCTORS (GENERAL)	PLAYGROUNDS
INTERACTION PROCESS ANALYSIS	POSTDOCTORAL EDUCATION
INTERAGENCY COOPERATION	(TEACHERS)
INTERDISCIPLINARY APPROACH	PRACTICUMS
INTERNSHIP PROGRAMS	PREGNANCY
LABORATORY SCHOOLS	PRESERVICE EDUCATION
LABORATORY TRAINING (TEACHERS)	(TEACHERS)
LEARNING PROCESSES	PROFESSIONAL CONTINUING
LEARNING THEORIES	EDUCATION (TEACHERS)
LEGAL ISSUES (TEACHERS)	PROFESSIONAL DEVELOPMENT
LEISURE	(TEACHERS)
LIFETIME SPORTS	PROFESSIONAL RECOGNITION
MAINSTREAMING (REGULAR	PROGRAM DESCRIPTIONS
CLASSROOM PLACEMENT)	PROGRAM DEVELOPMENT
MASTER TEACHERS	PROGRAM EFFECTIVENESS
MEASUREMENT	PROGRAM PLANNING
PROCEDURES/TECHNIQUES	PROTOCOL MATERIALS
MEDICAL SERVICES (HEALTH	PSYCHOMOTOR SKILLS
EDUCATION)	PUBLIC HEALTH (TEACHERS)
METHOD TEACHING	RECREATION (HEALTH, PHYSICAL
MODELS (TEACHING)	EDUCATION & RECREATION)
MOTIVATION TECHNIQUES	RECRUITMENT (TEACHER)
(TEACHING)	REINFORCEMENT (TEACHING)
MOVEMENT EDUCATION	RELEVANCE (EDUCATION)
NCNGRADE SCHOOL (CONTINUOUS	RESEARCH AND DEVELOPMENT
PROGRESS PLAN)	CENTERS
NON SCHOOL EDUCATIONAL PROGRAMS	RETIREMENT (TEACHERS)
NONTRADITIONAL EDUCATION	ROLE PERCEPTION
(TEACHING ALTERNATIVES)	SAFETY
NONVERBAL COMMUNICATION	SALARIES (TEACHER)
NUTRITION EDUCATION	SCHOOL BUSINESS RELATIONSHIP
OPEN EDUCATION	SCHOOL COMMUNITY RELATIONSHIP
OPEN PLAN SCHOOLS	SCHOOL HEALTH SERVICES
OPAL COMMUNICATION (TEACHING)	SCHOOL PERSONNEL/FACULTY
ORGANIZATIONAL CLIMATE	SCHOOL SAFETY
PROFESSIONAL SCHOOL	SCHOOLS OF EDUCATION
PERSONNEL	SECONDARY SCHOOL EDUCATION
PARENT TEACHER COOPERATION	SENSITIVITY TRAINING
PARKS	SEX EDUCATION (HEALTH
PER TEACHING	EDUCATION)
PERFORMANCE BASED TEACHER	STAFF DEVELOPMENT
EDUCATION	STAFF ROLE
PERFORMANCE CRITERIA	STAFF UTILIZATION
PERFORMANCE SPECIFICATIONS	STATE BOARDS OF EDUCATION
PHILOSOPHY (EDUCATIONAL)	STATE DEPARTMENTS OF EDUCATION
PHYSICAL DEVELOPMENT	STATE STANDARDS

STRESS VARIABLES	TEACHERS (GENERAL)
STUDENT ATTITUDES	TEACHING
STUDENT CENTERED CURRICULUM	TEACHING AIDS
STUDENT EVALUATION	TEACHING ASSISTANTS
STUDENT EVALUATION OF TEACHER PERFORMANCE	TEACHING CONDITIONS
STUDENT TEACHEE RELATIONSHIP	TEACHING EXPERIENCE
STUDENT TEACHERS/TEACHING	TEACHING GUIDES
STUDENT VOLUNTEERS	TEACHING METHODS
SUPERVISORY METHODS	TEACHING MODELS
SUPERVISORY TRAINING	TEACHING SKILLS
SUPERVISORY VOLUNTEERS	TEACHING STYLES
TEACHER ADMINISTRATION RELATIONSHIP	TEACHING TECHNIQUES
TEACHER AIDES	TEAM TEACHING
TEACHER ASSOCIATIONS	TENURE (TEACHERS)
TEACHER ATTITUDES	TIME FACTORS (LEARNING)
TEACHER BEHAVIOR	TRAINING LABORATORIES
TEACHER BURNOUT	TUTORIAL PROGRAMS
TEACHER CENTERS	TUTORING
TEACHER CERTIFICATION	VERBAL COMMUNICATION
TEACHER CHARACTERISTICS	VOLUNTEERS (TEACHERS AIDES)
TEACHER COFFS	VOUCHERS
TEACHER EDUCATION (INCLUDING GOVERNANCE, FINANCE)	WOMENS ATHLETICS
TEACHER EDUCATION CURRICULUM	
TEACHER EDUCATION PROGRAMS	
TEACHER EDUCATOR EDUCATION	
TEACHER EDUCATORS	
TEACHER EFFECTIVENESS	
TEACHER EMPLOYMENT	
TEACHER EVALUATION	
TEACHER IMPROVEMENT	
TEACHER INFLUENCE	
TEACHER MILITANCY	
TEACHER MOFALE	
TEACHER MOTIVATION	
TEACHER CRIMINALITY	
TEACHER PARTICIPATION	
TEACHER PROMOTION	
TEACHER RECRUITMENT	
TEACHER RECRUITMENT/SELECTION	
TEACHER RETIREMENT	
TEACHER ROLE	
TEACHER SALARIES	
TEACHER SELECTION	
TEACHER STEREOTYPES	
TEACHER STRIKES	
TEACHER SUPERVISION	
TEACHER SUPPLY AND DEMAND	
TEACHER WELFARE	
TEACHER WORKSHOPS	

TESTS, MEASUREMENT, AND EVALUATION (TM)

Scope of Interest

Tests or other measurement devices, and documents whose major purpose is confined to discussions of such instruments. Such documents might announce the availability of an instrument, describe its characteristics, outline its development, explore its reliability and validity, provide a critical review, summarize recent developments in the use of the measure, or explain how it could be used more effectively.

Methodology of measurement and evaluation. These documents might describe measurement techniques or evaluation models, indicate the appropriate use of these techniques, explore their advantages and disadvantages, or contrast and compare various ways of collecting, analyzing, and quantifying data.

Evaluation of programs, projects, and procedures. When an evaluation report is primarily concerned with the evaluation design, procedures, or instrumentation, it is within the scope of TM, regardless of the population or subject area involved. Not within the TM scope are evaluation reports in which the methodology and instrumentation are secondary to programmatic concerns. These documents are processed by the clearinghouse responsible for the subject area or population involved.

Research design and methodology. These documents might discuss the selection of an appropriate research design, problems associated with various experimental or quasiexperimental designs, and appropriate research methods. Also appropriate for TM are documents on statistical procedures used to analyze research data.

Human development. TM is responsible for those areas of human development that do not come under the scope of other clearinghouses. TM does not handle documents concerned with the development of infants and young children, development in the handicapped, or the development of language skills, mathematical reasoning, or moral values, etc..

Learning Theory. TM is responsible for those aspects of learning theory that are not specific to a population (i.e., infants and young children, the handicapped, or disadvantaged) or subject areas covered by other clearinghouses (i.e., language acquisition or learning social studies concepts).

Brief Statement

Tests and other measurement devices; methodology of measurement and evaluation; application of tests, measurement, or evaluation in educational projects or programs; research design and methodology in the area of testing and measurement/evaluation; learning theory in general.

TM APPLICABLE TERMS

ABILITY	CHEATING
ABILITY GROUPING	CHECK LISTS
ABILITY IDENTIFICATION	CHILD DEVELOPMENT
ABSTRACT REASNING	CLASS RANK
ACADEMIC ABILITY	CLASSIFICATION
ACADEMIC ACHIEVEMENT	CLASSROOM OBSERVATION
ACADEMIC APTITUDE	TECHNIQUES
ACADEMIC RECORDS	CLASSROOM RESEARCH
ACADEMIC STANDARDS	CLINICAL DIAGNOSIS
ACCOUNTABILITY	CLOZE PROCEDURE
ACCREDITATION	CLUSTER ANALYSIS
ACCREDITING AGENCIES	COGNITIVE ABILITY
ACHIEVEMENT	COGNITIVE DEVELOPMENT
ACHIEVEMENT GAINS	COGNITIVE MEASUREMENT
ACHIEVEMENT RATING	COGNITIVE OBJECTIVES
ACHIEVEMENT TESIS	COGNITIVE PROCESSES
ACTION RESEARCH	COGNITIVE STYLE
ADAPTATION LEVEL THEORY	COGNITIVE TESTS
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ADMISSION (SCHOOL)	COLLEGE ADMISSION
ADMISSION CRITERIA	COLLEGE ENTRANCE EXAMINATIONS
ADVANCED PLACEMENT	COMMUNITY STUDY
ADVANCED PLACEMENT PROGRAMS	COMMUNITY SURVEYS
AFFECTIVE MEASURES	COMPARATIVE ANALYSIS
ANALYSIS OF COVARIANCE	COMPARATIVE TESTING
ANALYSIS OF VARIANCE	COMPENSATION (CONCEPT)
ANSWER KEYS	COMPETENCE
ANSWER SHEETS	COMPETITIVE SELECTION
APTITUDE	COMPONENTIAL ANALYSIS
APTITUDE TESIS	COMPUTER ASSISTED TESTING
APTITUDE TREATMENT INTERACTION	CONCEPT FORMATION
ASSOCIATION MEASURES	CONCEPTUAL TEMPO
ASSOCIATIVE LEARNING	CONFIDENCE TESTING
ATTENTION	CONFIDENTIAL RECORDS
ATTENTION CONTROL	CONFIDENTIALITY
ATTENTION SPAN	CONSERVATION (CONCEPT)
ATTITUDE MEASURES	CONSTRUCTED RESPONSE
ATTRITION (RESEARCH STUDIES)	CONTENT ANALYSIS
AUDIOMETRIC TESTS	CONTROL GROUPS
AUDITORY EVALUATION	CORRELATION
AUDITORY TESIS	COST EFFECTIVENESS
BASIC SKILLS	COUNSELOR EVALUATION
BAYESIAN STATISTICS	COURSE EVALUATION
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BEHAVIOR TECHNIES	CREDIT NO CREDIT GRADING
BEHAVIORAL OBJECTIVES	CRITERIA
BEHAVIORAL SCIENCE RESEARCH	CRITERION REFERENCED TESTS
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DATA ANALYSIS	GRADING
DATA COLLECTION	GRADUATE SURVEYS
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EDUCATIONAL DIAGNOSIS	INDIVIDUAL DIFFERENCES
EDUCATIONAL EXPERIMENTS	INDIVIDUAL TESTING
EDUCATIONAL OBJECTIVES	INFORMAL ASSESSMENT
EDUCATIONAL PSYCHOLOGY	INFORMAL READING INVENTORIES
EDUCATIONAL QUALITY	INPUT OUTPUT ANALYSIS
EDUCATIONAL RESEARCH	INSTITUTIONAL EVALUATION
EDUCATIONAL RESEARCHERS	INSTITUTIONAL RESEARCH
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URBAN EDUCATION (UD)

Scope of Interest

The academic, intellectual, affective, and social performance of urban and minority young people from grade three through college entrance; the education of blacks, Puerto Ricans, and Asian and Pacific Americans (including Hawaiians), immigrants, and refugees, in urban, suburban, and rural areas, as well as the education of all other ethnic, national origin, and minority groups in urban and suburban areas only; learning experiences designed to meet the special needs of the diverse populations served by urban and minority schools; structural changes in classrooms, schools, districts, and communities that directly affect urban children and youth; economic and ethnic discrimination, segregation, desegregation, and integration in schools and districts; educational equity at all grade levels and for all population groups; the education of urban and minority populations in other countries; the social life, conditions, institutions, policies, and services that affect urban and minority children and youth (e.g., health and nutrition, housing, neighborhood and community concerns, etc.).

Notes

The interests of the Clearinghouse on Urban Education extend to programs and practices in public, parochial, and private schools.

Documents about Native Americans, Chicanos, and Spanish-Americans (i.e., those with an Iberian background) are processed by the RC Clearinghouse. For processing documents dealing with ethnic groups, the chart on the following page shows the agreed upon division of coverage between the UD and RC Clearinghouses.

ETHNIC GROUP	LOCATION	
	URBAN/SUBURBAN	RURAL
Blacks	UD	UD
Puerto Ricans	UD	UD
Cubans	UD	UD
Asian Americans	UD	UD
Mexican Americans (Spanish Americans, Chicanos, Hispanos, Mexicans)	RC	RC
American Indians/Alaska Natives (Native Americans, Eskimos, Aleuts, and Canada Natives)	RC	RC
Migrants	RC	RC
All Others	UD	RC

Brief Statement

Programs and practices in public, parochial, and private schools in urban areas and the education of particular racial/ethnic minority children and youth in various settings---local, national, and international; the theory and practice of educational equity; urban and minority experiences; and urban and minority social institutions and services.

UD APPLICABLE TERMS

ABILITY GROUPING
ACADEMIC ACHIEVEMENT
ACADEMIC PERFORMANCE
ACTIVISM
ADMINISTRATOR ATTITUDES
AFFIRMATIVE ACTION
AFRICAN AMERICAN STUDIES
ASIAN AMERICANS
BEHAVIOR CHANGE
BIRACIAL SCHOOLS
BLACK ATTITUDES
BLACK BUSINESSES
BLACK COMMUNITY
BLACK CULTURE
BLACK DIALECTS
BLACK EDUCATION
BLACK EMPLOYMENT
BLACK HISTORY
BLACK INFLUENCES
BLACK POWER
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BLACK STUDENTS
BLACK STUDIES
BUSING (BUS TRANSPORTATION FOR
INTEGRATION)
CHANGING ATTITUDES
CHILD DEVELOPMENT
CIVIL RIGHTS
CLASSROOM ENVIRONMENT
COGNITIVE ABILITY
COGNITIVE DEVELOPMENT
COMMUNITY CONTROL
COMPENSATORY EDUCATION
COMPENSATORY EDUCATION
PROGRAMS
COURT LITIGATION
CROSS CULTURAL STUDIES
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CULTURAL DIFFERENCES
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CULTURAL PLURALISM
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(URBAN AREAS)
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CURRICULUM DEVELOPMENT
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DEPRESSED AREAS (GEOGRAPHIC)
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DESEGREGATION EFFECTS

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DESEGREGATION METHODS
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MINORITY GROUPS
MOBILIZATION (DISADVANTAGED)
MULTICULTURAL EDUCATION
NONSTANDARD DIALECTS
NUTRITION
OUTREACH SERVICES (HEALTH AND
SOCIAL SERVICES)
PACIFIC AMERICANS
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URBAN ENVIRONMENT -
WELFARE SERVICES

05

SIANS
NS EDUCATION
NS STUDIES
H EMPLOYMENT (MINORITIES)

I N D E X

This index contains in one alphabetical array all applicable terms and descriptors cited in the foregoing statements of scope. The user is led from the term to the particular Clearinghouse that used the term to describe its area of interest.

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(ALL CLEARINGHOUSES)

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PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

APPENDIX B : Glossary of Terms

August 1982

EDUCATIONAL RESOURCES INFORMATION CENTER

**National Institute of Education
U.S. Department of Education**

**GLOSSARY OF TERMS
USED IN THE
ERIC PROCESSING MANUAL**

GLOSSARY OF TERMS
USED IN THE
ERIC PROCESSING MANUAL

ABSTRACT

A brief (usually 200 words or less) narrative description of the subject content contained in a larger body of information (e.g., a document). Abstracts are tersely written representations of the document, avoiding non-information-bearing words, wasteful constructions, and added interpretation or criticism. There are several basic types used in the ERIC system: informative, indicative, and informative/indicative.

ABSTRACT (INDICATIVE)

A summary of the nature of or kind of information contained in a larger body of information (e.g., a document). A description of or guide to the content and format of the document, written from the viewpoint of an informed but impartial and objective reader. It reports broadly what is discussed or included in the document, in what manner the information is presented, and if necessary, to whom the document is addressed. An indicative abstract tells you what you will find if you go to the document, but doesn't necessarily repeat any of the information content.

ABSTRACT (INFORMATIVE)

A summary of the important results or significant facts contained in a larger body of information (e.g., a document). A condensed version of the essential ideas of a document, containing a statement (from the viewpoint of the author) of the thesis, development or proof, and conclusions. An informative abstract attempts to state what the document actually says, to actually convey substantive information, and to some extent substitute for the entire document itself, rather than to simply indicate what one can find in the document if one goes to it.

ABSTRACT (INFORMATIVE/INDICATIVE)

An abstract that contains a mix of approaches, including informative information (direct transmission of author's ideas) and indicative information (abstractor's description of what the reader will find in the document). This type of abstract must be carefully constructed so as not to confuse the reader as to the viewpoint being expressed (i.e., author's or abstractor's).

ACCESSION

An item selected for a collection or database and put through the processing steps to be incorporated in that collection or database.

ACCESSION NUMBER

A number (or number with alpha prefix) assigned sequentially to incoming items (e.g., documents) to uniquely identify them. Clearinghouses assign a Clearinghouse Accession Number (e.g., TM 000 123) for temporary in-process control. Upon publication in RIE or CIJE, each document is assigned a permanent systemwide accession number (e.g., ED 123 456 or EJ 123 456).

ACQUISITIONS

With reference to a function: the critical first step in building a library collection or database. This activity includes acquiring books, documents, and other such material by a library or information center, through purchase, gift, or exchange. Acquisitions provides the raw material for the following functions: selection, processing (cataloging, indexing, abstracting), announcement, retrieval, and dissemination. All ERIC components play a role in acquisitions efforts.

With reference to materials: the books, documents, journals, and other such materials acquired by a library or information center, through purchase, gift, or exchange.

ACQUISITIONS ARRANGEMENT

An agreement with a document-producing organization for the automatic receipt of all (or a relevant portion) of their document output. The receiving organization is, in effect, placed on the distribution or mailing list of the producing organization and therefore need not make individual requests for every document of interest. (See also ERIC Acquisitions Arrangements).

ACQUISITIONS DATA REPORT (ADR)

A monthly reference publication (produced by the ERIC Facility on the basis of input received from the clearinghouses), containing a title listing of all documents acquired by the clearinghouses, over a given period of time, for possible announcement in RIE. The period of time covered varies. Used for duplicate checking.

ACRONYM

A word formed from the initial letters of a name, e.g., ERIC (Educational Resources Information Center).

ADD DATE

On a computerized record, the date the record was added to the file; usually expressed as a Julian date.

ADVISORY BOARD

A group of specialists, in areas pertinent to the scope of a given clearinghouse, selected by that clearinghouse as resource persons to advise them on various matters, e.g., desirable information analysis products.

ALPHABETICAL DISPLAY (IDENTIFIERS)

The primary arrangement of the Identifier Authority List (IAL). All approved Identifiers are listed word-by-word, along with Scope Notes (definitions), where appropriate, and references from nonpreferred terminology. (A second IAL arrangement is the Category Display.)

ALPHABETICAL DISPLAY (THESAURUS)

The primary arrangement or format of the Thesaurus of ERIC Descriptors (secondary arrangements are the Rotated Display, the Hierarchical Display, and the Descriptor Group Display). All valid Descriptors (Main Terms), invalid Descriptors ("dead" terms), and USE references appear in this display interfiled alphabetically word-by-word, together with definitions and cross-reference structures. It is the only display containing the complete records of all Thesaurus terms.

ANALYTIC

A part of a larger document that is being treated and processed as if it were a separate document; the part is "analyzed out" of the parent document.

ANNOTATION

A brief (no more than 50 words) notation of subject content. In the ERIC system annotations are written for journal articles (CIJE accessions) whose titles are not sufficient to adequately convey their content.

ANSI

American National Standards Institute.

AUTHORITY LIST

A controlled list of approved forms. A Thesaurus is an authority list of indexing terms. A Source Directory is an authority list of organizational/corporate/institutional names. In information systems, data being entered into a given field must frequently be in a form contained in an authority list before it will be permitted into the database.

AVAILABILITY

Documents announced in RIE must be available either through EDRS (Level 1 or 2) or through an outside source whose name and address can be cited in the Availability Field (Level 3). Some documents may be available both from EDRS and from some outside source.

BATCH PROCESSING

A procedure in which a number of transactions to be processed are accumulated and processed together. Usually they are sorted into order and matched sequentially against affected files. Batches are usually queued to be run and delivered at some future date.

BIBLIOGRAPHIES

Lists of materials relating to a particular subject, author, or period. Bibliographies may cite books, films, and multimedia materials and may or may not contain annotations or abstracts.

BIT

A contraction of the term "binary digit." (See also Byte.)

BOOLEAN ALGEBRA

A system for symbolizing logical statements by operators, usually AND, OR, and NOT, from which relationships among statements can then be derived mechanically. Boolean Algebra is an algebra of classes and is considered a branch of symbolic logic. The notation permits the expression of conditional statements and statements of fact in symbolic form, and by means of prescribed operations allows arrival at valid conclusions. It is much in use in information retrieval to express the conditions of a computer search. It is named after the mathematician George Boole (1815-1864).

BRIEF MATERIALS

Those documents of five or fewer pages, with the text containing 1,500 words or less. Short documents can create problems relating to user expectations and their entry into RIE should be kept to a minimum.

BROADER TERM (BT)

A Thesaurus cross-reference used to indicate hierarchical relationships among Descriptors. Broader terms are Descriptors representing conceptual classes that totally contain concepts represented by other Descriptors. For example, MATHEMATICS is considered to be a BT of ALGEBRA. Each BT is an indexable concept and the mandatory reciprocal of a "Narrower Term." The BT/NT relationship is the same as that between a genus and its member species.

BYTE

Loosely, a specified number of binary digits. Generally used to refer to the eight-bit code system used in third generation equipment (i.e., the EBCDIC character set). Eight bits identify a byte. One byte equates to one character (alphabetic, numeric, special). (See also EBCDIC).

CAMERA-READY COPY

Artwork, typed or composed text, etc., which is ready to be photographed for reproduction without further alteration.

CATALOGING (DESCRIPTIVE)

The description of a documentary entity from a physical and bibliographic point of view, as distinguished from subject cataloging. Standard library-type cataloging picks up such data elements as author, title, publisher, number of pages, etc. and displays them on a 3x5 card or equivalent medium for patrons and users.

CATALOGING (SUBJECT)

See "Indexing."

CATEGORY DISPLAY

One of two arrangements or formats of the Identifier Authority List (IAL) (the other being the Alphabetical Display). The display groups each Identifier into one of 20 broad categories, e.g., "Personal Names." The specific arrangement is by category followed by alphabetic arrays of Identifiers assigned to each.

CATHODE RAY TUBE (CRT)

A vacuum tube capable of generating an image on a surface by the effect of a stream of electrons upon phosphors on the surface. The television tube in a TV set is an example.

CENTRAL ERIC

The organizational unit within the National Institute of Education (NIE) responsible for the ERIC network, its budgeting, funding, planning, program development, monitoring, policy setting, etc. All ERIC components (e.g., ERIC Facility, EDRS, Clearinghouses, CIJE Publisher, etc.) report to Central ERIC.

CHANGE DATE

On a computerized record, the date the record was last added to or changed; usually expressed as a Julian date.

CIJE PUBLISHER

Commercial printing organization responsible for publishing CIJE, the ERIC Thesaurus, and annual cumulations of RIE. Oryx Press (Phoenix, AZ) has been the CIJE publisher since 1979. The previous CIJE publisher was Macmillan Information (New York, NY). (See also Current Index to Journals in Education (CIJE)).

CITATION INDEX

A form of index to the literature which lists for a given article all subsequent articles which refer to it.

CLEARINGHOUSE

A contractor within the ERIC network that takes responsibility for the acquisition and processing of materials in one of the major areas of the field of education, e.g., Higher Education, Languages, Tests, etc. ERIC clearinghouses have traditionally been located within non-profit institutions such as universities; the exact number (now at 16) varies with the shifting needs of the educational community. An ERIC Clearinghouse

has responsibility within the network for acquiring the significant educational literature within its particular scope; selecting the highest quality and most relevant material; processing (i.e. cataloging, indexing, abstracting) the selected items for input to the database; providing reference and retrieval services; developing information analysis products; conducting workshops and making presentations; and generating other types of communication links within the educational community.

CLEARINGHOUSE ACCESSION LOG SHEET

A log sheet enclosed with every shipment of documents sent from an ERIC clearinghouse to the ERIC Facility. The log sheet lists the documents contained in the shipment, identifying their Level status, and whether they are clearinghouse-generated publications (for highlighting).

CLEARINGHOUSE ACCESSION NUMBER

Each clearinghouse in the ERIC system is identified by a two-letter alpha prefix (see Clearinghouse prefix). This prefix, together with a six-digit sequentially assigned number forms a preliminary clearinghouse accession number. Temporarily, up to the time they are announced in RIE or CIJE, all documents (and associated paperwork) are identified and referred to by such numbers. Upon publication in RIE or CIJE, each document is assigned a permanent systemwide accession number (e.g., ED 123 456 or EJ 123 456).

CLEARINGHOUSE PREFIX

A two-letter code assigned to ERIC clearinghouses for easy identification. The codes are used as prefixes for the temporary clearinghouse accession numbers. The following codes are currently in use: CE, CG, CS, EA, EC, FL, HE, IR, JC, PS, RC, SE, SO, SP, TM, UD. The following codes have been used in the past: AC, AL, EF, EM, LI, RE, TE, VT.

CLEARINGHOUSE SCOPE OF INTEREST GUIDE

A reference tool which describes and defines the specific subject areas of responsibility of each ERIC clearinghouse.

CODEN

A five-character identification code for periodical titles. Maintained by the American Society for Testing and Materials (ASTM). The coden for the Journal of the American Society for Information Science is: AISJB6. (See also ISSN.)

COLLATE

The process of merging two or more similarly sequenced files of data.

COLLATION

A statement of the extent of a document in pages or volumes, size, and important illustrative matter.

CONCEPTS (ACTION)

Concepts that identify the action or activity used in a study or educational application. Examples are: instruction, testing, and experiments.

CONCEPTS (CURRICULUM)

Concepts that refer to the educational subject which is being administered, taught, or measured. Examples are: arithmetic, history, learning disabilities, reading, spatial perception, etc.

CONCEPTS (MATERIALS)

Concepts that identify the materials or methodology used in a study or educational application. Examples are: language laboratories, objective tests, and filmstrips.

CONCEPTS (POPULATION)

Concepts that categorize and identify the group or individual studied by a document or intended as the users of the document. Most important to ERIC users are concepts identifying the population's educational (grade/academic) level and age level. However, other categories which may be applicable are occupation, race or nationality, religion, intelligence or ability level, physical or emotional characteristics, socioeconomic characteristics, and sex.

CONTRACT/GRANT NUMBER INDEX

A listing of all the contract and grant numbers appearing in the Contract Number and Grant Number fields of documents announced in PIE, together with the accession numbers of the reports to which they apply.

CONTRACT NUMBER

The alphanumeric or numeric identifier assigned by a sponsoring agency to identify a given contract. (See also Grant Number).

COORDINATE INDEXING

The assignment to a document (or other entity to be indexed) of unitized index terms that are meant to be put together (i.e., coordinated) at the time of retrieval in order to form the more complex concepts involved in the user's inquiry. So called because the searcher must coordinate the index terms when the search is conducted in order to arrive at the desired result.

COPYRIGHT

Literally, the right to copy, given by law in each country to the author or creator of the thing copyrighted. The laws vary in their details, but the objective is to stimulate invention, literary creativity, and publishing via the concept of "intellectual property" which can be bought and sold. In the United States, the new Copyright Law (as of January 1978) no longer requires formal registration at the Copyright Office of the thing protected.

COPYRIGHT REVISION LAW (PL-94-553)

A law passed in 1977, that revised the old (1909) copyright law, provided new definitions of concepts such as Fair Use, and established new regulations and procedures for copyright. The net effect of the law on ERIC is that effective January 1, 1978, ERIC is required to assume that all private sector documents, whether carrying a copyright notice or not, are copyrighted, unless such documents were published without a copyright notice prior to January 1, 1978. For this reason, unless ERIC already has blanket reproduction permission from the source organization, a signed formal reproduction release form must be obtained for every title selected for the ERIC system. The existence of an ad hoc letter of transmittal giving ERIC permission to reproduce the report is not sufficient.

CORE JOURNAL

A journal which concentrates its articles and features in one subject area, e.g., Physics, Education, Photography, etc., as contrasted to the occasional inclusion of material of interest to that area. A core journal in education would be the Journal of Experimental Education; a non-core journal in education would be Scientific American.

CORPORATE MATERIALS

"Corporate Materials" refers to classroom materials produced by industry (e.g., Kodak, McDonald's, Kellogg, General Motors, J.C. Penney, etc.), trade associations, and public utilities. Corporate materials are generally inexpensive or even free. Environment, energy, and nutrition are common topics. Most materials treat the company's area of business, i.e., Kellogg publishes materials which are food-related, etc. Care must be taken in the selection of corporate materials to avoid those that exist primarily for advertising or public relations purposes.

COSATI

An acronym for the Committee on Scientific and Technical Information. Now defunct. While in existence, developed several information processing standards.

COST EFFECTIVENESS

A measure of performance used for the evaluation of systems. It is usually expressed as a ratio of some measure of cost to some measure of performance. The higher the performance and the lower the cost, the better the cost effectiveness of the system.

CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)

A paperbound monthly (12 issues per year) index journal that announces journal articles from over 700 education and education-related journals. CIJE is made up of a main entry section, consisting of cataloging and indexing information and (optionally) 50-word annotations; an index section, consisting of separate subject and author indexes; and a journal contents section arranged by journal name and showing the articles accessioned from each journal issue. Semiannual cumulations are available. Each issue announces approximately 1,700 items and is available on subscription from the CIJE Publisher.

CURRENT PROJECT INFORMATION (CPI)

A U.S. Office of Education (USOE) publication (now defunct) listing and indexing on-going projects supported by USOE contracts and grants. Projects were assigned EP accession numbers and were handled very much as documents even though many of the data elements and indexes were necessarily different. For several years EP records were announced and indexed in a special section of Resources in Education (RIE). The equivalent NIE publication is entitled Educational Research in Progress.

DATA ELEMENT

A specific, well-defined piece of information forming part of a larger record (such as a bibliographic description) and having a unique functional relationship with the content of the document to which the record refers. Examples are: title, author name, report number, etc. Usually synonymous with "field."

DATA ENTRY

The conversion/reduction of data from eye-readable form to machine-readable form. All ERIC bibliographic data must go through a data entry process to permit subsequent editing and computer processing. At present, a mix of Optical Character Recognition (OCR) techniques and online techniques are employed, dependent on equipment available at each Clearinghouse.

DATABASE

A file of data, usually in machine-readable form.

DEBUG

To locate errors in a computer program and to correct them.

DESCRIPTIVE CATALOGING

See "Cataloging (Descriptive)."

DESCRIPTOR

A meaningful conceptual term or short phrase that can be selected from a defined and controlled vocabulary for the purpose of describing/characterizing/indexing the subject content of a document, text, or other data. (See also Main Term.)

DESCRIPTOR AND IDENTIFIER USAGE REPORT

A report that provides a complete record of the usage of each index term through the date the report is produced. It consists of an alphabetic array of every index term that has been used, together with a complete list of all accession numbers that have been indexed by the term, and includes a count of how many accessions are listed.

DESCRIPTOR GROUP DISPLAY

One of four arrangements or formats of the Thesaurus of ERIC Descriptors (the others being the Alphabetical Display, the Rotated Display, and the Hierarchical Display). This display arranges each of the Descriptors in the Thesaurus into one (and only one) of 41 broad categories, e.g., "Equipment." The display shows each of these categories together with alphabetic arrays of the terms that have been assigned to each. (See also Group Codes.)

DESCRIPTOR JUSTIFICATION FORM (DJF)

The original Thesaurus input form. Discontinued in 1980 and replaced by the Vocabulary Development Form (q.v.).

DESCRIPTORS (DEAD/INVALID)

Terms that once were valid Descriptors but that have been deliberately removed from the usable terms in the Thesaurus. Unlike transferred Descriptors, postings for invalid Descriptors remain in the ERIC files. "Dead term" status puts a hold on former Descriptors, preventing their further use in indexing and allowing them to be set aside for examination and possible reindexing at a later date.

DESCRIPTORS (TRANSFERRED)

Former indexable or main terms that have been downgraded to the status of Used For (UF) terms. Former Descriptors displayed as UFs are no longer carried in the ERIC files. Their postings have been transferred to the preferred USE term(s).

DIRECT ACCESS

The process of obtaining data from the memory or storage of a computer by going directly to its location, usually as specified by an address, without reading any other data. Contrasted with sequential or linear access.

DISSERTATION ABSTRACTS

An abstract journal (produced by University Microfilms International) that announces the majority of domestic doctoral dissertations.

DOCUMENT

A generic term referring to any printed form in which a written or graphic work may be produced. Encompasses reports, speeches, journal articles, dissertations, brochures, pamphlets, proceedings, books, and many other bibliographic forms.

DOCUMENT PREPARATION

The physical preparation of a document for filming by EDRS, e.g., retyping of illegible pages, relabeling a colored graph so as to make it independent of color, adding information to title page from cover not to be filmed, etc.

DOCUMENT TRANSFER FORM

A form which records the transfer of a document from one Clearinghouse to another (usually because the subject matter is more appropriate for the receiving Clearinghouse).

DUPLICATE CHECKING

The process of determining whether a document in hand has previously entered the ERIC system. If the answer is "Yes," there are three possibilities: the document has either already been announced, it is "in process" but not yet announced, or it has been rejected (discarded or retained exclusively for local files.) Potential duplicates can be identified by computer checks, but the final determination must usually be made by a human editor.

EBCDIC

Extended Binary Coded Decimal Interchange Code. The principal code used by IBM computer systems.

ED NUMBER

ED stands for ERIC Document. ED accession numbers identify documents announced in Resources in Education (RIE). They are assigned automatically to documents by the ERIC computer system as one of the last steps in computer processing. This action is necessarily delayed so that all duplicates, rejects, and other removals can be accomplished before final accessioning takes place, thus eliminating numeric gaps. Documents are ordered by the public from EDRS by using the ED number.

EDITING

Used to refer to the review by the ERIC Facility of the document processing functions performed by the ERIC Clearinghouses (cataloging, abstracting, indexing). Ensures completeness, accuracy, and conformity to the conventions of the ERIC Processing Manual of data originally exhibiting an inevitable variability by virtue of being submitted from 16 remote sites.

EDRS

An acronym standing for ERIC Document Reproduction Service. EDRS is the document supply and distribution component of the ERIC network and is responsible for the microfiching of all documents, the handling of standing orders (subscriptions) for microfiche, and the handling of on-demand orders for both microfiche and paper copy. EDRS receives documents (Level 1 and 2) and data for this purpose from the ERIC Facility. The current contractor is Computer Microfilm International Corporation; previous contractors have been Bell & Howell, National Cash Register, and Leasco Information Products.

EJ NUMBER

EJ stands for ERIC Journal Number. Assigned to journal articles announced in Current Index to Journals in Education. Used for ordering reprints from article reprint sources such as University Microfilms International (UMI).

ERIC

An acronym standing for Educational Resources Information Center. A decentralized network of organizations whose primary goal is bibliographic control over the domestic literature of education. Components are: (1) Central ERIC (the Government sponsor and monitor); (2) ERIC Clearinghouses (16 non-profit contractors); (3) Support Contractors, (a) ERIC Facility—editing, computer processing, (b) ERIC Document Reproduction Service—microfiching, document reproduction; (c) CIJE publisher—commercial publishing.

ERIC ABSTRACTOR/INDEXER WORKBOOK

An instructional guide for new ERIC abstractors and indexers. It supplements the ERIC Processing Manual by providing a set of exercises illustrating and reinforcing the basic principles of ERIC indexing and abstracting.

ERIC ACQUISITIONS ARRANGEMENTS (EAA)

A systemwide list of all Clearinghouse and Facility acquisitions arrangements. Entries cite the name of the organization, date of contact, level of reproduction release, authorization, authorizing person, and any additional explanatory notes. The list includes all organizations whose materials are regularly and routinely acquired by ERIC and its use helps to prevent duplicate acquisitions efforts and to facilitate the exchange of release forms. (See also Acquisitions Arrangements).

ERIC ADMINISTRATIVE BULLETIN (EAB)

A monthly newsletter, internal to the ERIC system, consisting of news items and notices of common interest supplied by all ERIC components. It is structured into several sections: action items, personnel news, new publications, advisories, contract renewals, etc.

ERIC CHARACTER SET

The alphabetic characters (upper and lower case), numeric characters, and special characters permissible in the ERIC database.

ERIC CLEARINGHOUSE SCOPE OF INTEREST GUIDE

A guide that provides a complete description of each clearinghouse's area of coverage and lists (mini-thesauri) of those Descriptors most frequently used in indexing by each clearinghouse.

ERIC CONFERENCE CALENDAR

A list of all the conferences in which clearinghouses will participate during the upcoming calendar year, including those from which papers will be solicited. The purpose of the list is to coordinate conference participation and conference-related acquisitions efforts.

ERIC DIRECTORY

This publication provides complete mailing addresses, telephone numbers, and staff names and titles for all ERIC network components.

ERIC DOCUMENT REPRODUCIBILITY GUIDELINES

A publication (produced by the ERIC Facility) intended to be used as a guide to determine the acceptability of documents for microfilming in terms of their paper color, ink color, paper type, type size, photographs, under-oversized pages, and other strictly physical factors.

ERIC PROCESSING AND REFERENCE FACILITY

A centralized information processing facility serving all components of the ERIC network under the policy direction of Central ERIC. It accepts data from the ERIC clearinghouses, edits and keys the data, and builds, maintains, and produces various products from the database. A wide variety of supporting functions are also performed, e.g., acquisitions, lexicography, data conversion, reference, tape distribution, forms control, scheduling, etc.

ERIC SYSTEM DOCUMENTATION

The written documentation that describes the software (computer programs) that create the ERIC database, its authority lists, and the products created from it.

ERIC TECHNICAL MEETINGS

Meetings held once or twice a year in which selected technical personnel of the ERIC clearinghouses (abstractors, indexers, user services coordinators) meet to discuss current issues and resolve technical problems.

ERICTAPES

The commercial "brand" name used for the ERIC database in machine-readable form when it is sold to outside user groups.

ERICTOOLS

The commercial "brand" name used for the ERIC internal reference publications (e.g., Title Index, Source Directory) when they are sold to outside user groups.

EVALUATION

In the ERIC environment, Selection (the process of selecting items for RIE) is distinguished from Evaluation (the process of determining how well an item achieves its stated objectives). ERIC selects documents for its database, but does not attempt to evaluate the accuracy, rigor, experimental design, validity of conclusions, etc., of the items selected. Evaluation is left to the scientific community and to the users.

EXCHANGES

The trading of one organization's publications for those of another; a variation of automatic distribution. ERIC sometimes offers a complimentary subscription to RIE in exchange for the publications of a given prolific organization. Generally a quid pro quo must be demonstrated to justify the arrangement.

EXHAUSTIVITY

A measure of the extent to which all the distinct subjects discussed in a particular document are recognized in the indexing operation and translated into the language of the system. Also, a measure of the extent to which a search is a comprehensive and complete statement, retrieving the given topic from all angles.

FALSE DROP

A retrieval or "t" based on an unintended coordination of index terms. Synonymous with "dise."

FIELD READER

A consultant hired by the Department of Education to read and evaluate proposals and make recommendations as to whether they should be funded. Contracts with Field Readers usually provide for a set fee per proposal read.

FLOW CHART

A graphical representation of a sequence of operations.

FREE TEXT

The natural narrative language used by authors in creating the titles of documents and by abstractors in creating the abstracts, annotations, and cataloger's notes pertaining to those documents. The text of such fields is free or uncontrolled in contrast to the Descriptors and Identifiers constituting the controlled indexing vocabulary. Modern computer retrieval systems permit retrieval from either fields controlled by authority lists (such as thesauri) or from free text fields. Since the appearance of a word in free text may or may not have a significant relation to subject content, searching based on free text tends to retrieve a certain amount of low relevance material.

FUGITIVE LITERATURE

Unpublished, limited distribution material that is produced in limited quantities. Examples would be research reports, speeches, presentations, etc. Fugitive material has a tendency to disperse rapidly and to be unavailable within a relatively short time after it is generated. It varies widely in quality. If it is to be made available for the benefit of potential users (other than the small group of initial recipients), it must be captured and put under control by one of the database systems such as ERIC.

GANTT CHART

A graphical means of showing the flow of work activity against time, as work moves from one component station (person, equipment, or task) to another.

GENERIC STRUCTURING

The organizing of Descriptors into "hierarchical families." A hierarchical family is made up of a class or category of concepts and each of its members. The relationship between class and members is the same as that between a thing and its types, or, in zoological terms, a genus and its constituent species. The class or genus corresponds to a "Broader Term" and the members or species correspond to the "Narrower Terms" under the Broad Term.

GOVERNMENT PRINTING OFFICE (GPO)

The Public Printer responsible for printing most Federal Government publications. Relates to ERIC primarily by virtue of being the printer and subscription agent for RIE.

GPO DOCUMENTS

Documents printed by GPO do not require a copyright or reproduction release. They are assumed to have been generated with Federal Government funding under terms that either place them in the public domain or else reserve a free right of reproduction for U.S. Government purposes.

GRANT NUMBER

An alphanumeric tag representing the instrument through which financial support was given the work or research reported in a document. Similar to a contract number in function and purpose. The distinction is that the scope of work of a grant is more general and usually does not have lists of specific tasks and deliverables. A contract, on the other hand, usually carefully specifies certain tasks or contract-deliverable items and the contracting agency monitors the effort and follows up to see that all contractual obligations are met.

GROUP CODES

These 3-digit codes refer to the placement of each Thesaurus Descriptor in one of 41 (52 prior to the 1977-1980 Vocabulary Improvement Project) Descriptor Groups. These groups are broad subject categories that provide an overview of the Thesaurus vocabulary. They can be used for general browsing and searching.

HARD COPY

See "Paper Copy."

HIERARCHICAL DISPLAY

One of four arrangements or formats of the Thesaurus of ERIC Descriptors (the others being the Alphabetical Display, the Rotated Display, and the Descriptor Group Display). This display presents sets of generic tree structures showing, for every Thesaurus Descriptor, the trail of narrower terms below it and broader terms above it, each carried to the farthest extreme.

HIT

A record (in a database) that is retrieved in the course of a search.

HOLOGRAPHS

Handwritten documents.

IDENTIFIER

Semi-controlled retrieval terms intended to add a depth to indexing that is not always possible with Descriptors alone. An Identifier is usually the name of a specific entity, e.g., project, person, place, organization, test, group, item of equipment, piece of legislation. An Identifier may also be a new concept, under consideration for Descriptor status and awaiting approval for admission to a formally controlled vocabulary or thesaurus.

IDENTIFIER AUTHORITY LIST

A complete list of all approved Identifiers (alphabetical or by category).

INDEXING

The process of assigning words or terms to documents in order to describe their subject content for purposes of subsequent retrieval.

INDEXING (COORDINATE)

See "Coordinate Indexing."

INDICATIVE ABSTRACT

See "Abstract (Indicative)."

INFORMATION ANALYSIS PRODUCTS (IAPs)

Clearinghouse-produced publications, including research reviews, papers summarizing given topics, state-of-the-art papers, guides to a field or to the literature of a field, etc. IAP's generally attempt to compress or reduce the content of many documents into one synthesizing product.

INFORMATIVE ABSTRACT

See "Abstract (Informative)."

INFORMATIVE/INDICATIVE ABSTRACT

See "Abstract (Informative/Indicative)."

INTERCHANGE

A newsletter published irregularly (but approximately quarterly) by the ERIC Facility, containing news of interest to ERIC users of all types.

ISBN

International Standard Book Number

ISSN

International Standard Serial Number

JOURNAL ARTICLES

Generic term referring to independent writings appearing in journals and other serial publications, e.g., newsletters.

JOURNAL CONTENTS INDEX

An index in Current Index to Journals in Education (CIJE) that lists alphabetically each journal issue (and the articles within it) covered by that issue of CIJE.

JOURNALS (EDUCATION)

Journals concerned exclusively with one or more aspects of the field of education. They require regular monitoring by the ERIC clearinghouses and usually comprehensive coverage in CIJE.

JOURNALS (EDUCATION-RELATED)

Journals that regularly and frequently contain articles bearing on education, but whose main focus is elsewhere. They require regular monitoring by the ERIC clearinghouse and usually selective coverage in CIJE.

JOURNALS (NON-EDUCATION)

Journals that occasionally, but infrequently, contain an education-related article. They are not covered regularly in CIJE and education-related articles found in them are handled as "oneshot articles" (q.v.).

K-12

Kindergarten through the 12th grade.

LEGIBILITY

The quality of the printing in a particular document. Poor quality, which will not reproduce plainly, is often referred to as "marginal legibility." Documents that are predominantly of poor legibility should not be selected for the ERIC system. Documents with only a few poor quality pages may be processed at Level 2, i.e., microfiche only, with the title page marked "Best Available Copy." The purpose of restricting such documents to Level 2 is to avoid having EDRS customers paying paper copy reproduction prices for poor quality or unreadable pages.

LEVELS (1, 2, and 3)

Documents are announced in RIE at one of three possible levels:

Level 1: documents are available in both microfiche and paper copy from EDRS.

Level 2: documents are available only in microfiche from EDRS.

Level 3: documents are not available from EDRS, but an alternate source of availability is cited in the RIE announcement.

LEXICOGRAPHY

The principles and practices of dictionary making. In information systems, frequently used to refer to the principles and practices of thesaurus making and indexing vocabulary development and maintenance.

LINE IMAGE DATA SET (LIDS)

The preliminary computerized file, of bibliographic data, which serves as a "scratchpad" for editors and proofreaders working on Resources in Education (RIE). Data in LIDS may be corrected on a line basis (rather than a field basis). When the editors are satisfied with the correctness of the data in LIDS, it is "released" to the ERIC Master File, assigned final accession numbers, and subsequently processed by computer into an issue of RIE.

LINK

An additional symbol (e.g., "c") attached to an index term (or to a document number being posted to an index term) to designate the part of the document being indexed by the term. The purpose of a link is to avoid incorrect coordination (false drops) at retrieval by demanding that only index terms that were applied to the same section of a given document can be coordinated to produce that document as a "hit." Links are not currently employed in the ERIC Indexing System.

LINOTRON

A high-speed CRT-type photocomposition device operating off of magnetic tape input; manufactured by the Mergenthaler Linotype Company. In use at a few very high volume installations, e.g., U.S. Government Printing Office (GPO).

MACMILLAN INFORMATION

The contractor which produced Current Index to Journals in Education from 1969 through February 1979.

MAGNETIC TAPE

A long strip (typically 1 inch wide by 2400 feet long) of magnetizable plastic tape used for storing data. Usually data are stored and retrieved using sequential scan access.

MAIN TERM

Main terms are the preferred, postable terms in a thesaurus; they are used to index and search (i.e., describe and retrieve), in a consistent manner, the subject content of materials entered in an information system. The concepts "main term" and "Descriptor" are equivalent when used in the sense of controlled thesaurus vocabularies.

MAJOR TERM

A Descriptor or Identifier representing one of the major concepts contained in a bibliographic citation. Major terms appear in the published subject indexes; all other indexing terms are, by definition, "Minor." In order to restrict the size of published indexes, no more than five (5) major Descriptors and two (2) major Identifiers or

six (6) major Descriptors and one (1) major Identifier, may be assigned to any citation. A Descriptor or Identifier is Major or Minor only in the context of the particular citation where it is being used (i.e., it is not inherently major or minor).

MASTERS ABSTRACTS

A publication produced by University Microfilms International (UMI), which announces domestic Masters theses (and research papers from fifth-year programs).

MATHEMATICAL MODEL

A description of something in symbolic form in such a way that it can be formally manipulated and results derived without direct reference to the thing being modeled. Any scientific theory expressed as a set of equations is a mathematical model, for example.

MICROFICHE

A 4" x 6" (105 mm x 148 mm) flat sheet of film, containing reduced images of document pages. ERIC prepares microfiche for all Level 1 and 2 documents announced in RIE, using the COSATI/NMA standard (24X reduction; 98 frames in a 7 x 14 grid). Microfiche may be made of silver, diazo, or vesicular film. A microfiche reader or reader-printer is required to read the page image. Only the data on the header strip of microfiche (containing accession number, title, author, etc.) are eye-legible.

MICROFICHE INVENTORY AND QUALITY CONTROL CHECK

The process of inspecting an archival set of microfiche (shipped from EDRS to the ERIC Facility) frame-by-frame to detect filming and legibility errors.

MINOR TERM

A Descriptor or Identifier assigned to a citation and appearing in the printed Resume and in the machine record, but not in the published subject indexes.

MNEMONIC

Used to refer to any device or technique intended to assist the memory of a person.

MONOGRAPH

A book, treatise, pamphlet, or other document on a single specific subject. Usually scholarly and comprehensive in nature and focused on a limited area which it covers in depth.

NARROWER TERM (NT)

A Thesaurus cross-reference used to indicate hierarchical relationships among Descriptors. Narrower terms represent concepts totally included within a broader conceptual class (represented by another Descriptor). For example, ALGEBRA is considered an NT of MATHEMATICS. Because they are Descriptors, NTs are indexable and searchable. The indexable NT achieves ERIC's goal of "subject-specific" indexing. Its mandatory reciprocal is the "Broader Term." The BT/NT relationship is the same as that between a genus and its member species.

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP)

A large, formal effort, funded by the Federal Government, to determine the progress made in the United States in the teaching of various skills and disciplines (e.g., Reading, Mathematics, Citizenship), as measured by student abilities at different points in time. Currently headquartered at the Education Commission of the States (ECS). Considered by most to be the definitive source of information on whether American students are improving or getting worse in their comprehension of a subject.

NATIONAL INSTITUTE OF EDUCATION (NIE)

Created by Congress in 1972 and given responsibility for the conduct of federally-funded educational research. Modeled on the National Institutes of Health (NIH).

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

A major technical report processing center located within the Department of Commerce. Concentrates on the physical sciences. Publishes Government Reports Announcements (GRA). Mandated by law to function like a business, realizing its own revenues and seeking to be self-supporting.

NATURAL LANGUAGE

See "Free Text."

NDN

An acronym for National Diffusion Network, an NIE-supported project to assist schools in improving their educational practices through the adoption of existing exemplary education programs.

NIE DOCUMENT SELECTION REPORT

This report is made by the clearinghouses and lists all NIE documents received from the Facility which are not selected for RIE, stating the reason for their rejection. NIE reports which are not accepted are to be sent to Central ERIC for inclusion in the permanent NIE Library collection.

NOISE

See "False Drop."

OFFICE OF EDUCATION (OE)

Formerly the major education agency of the Federal Government. Merged into the Department of Education in May 1980.

"ONESHOT" JOURNAL ARTICLES

An education-related article found in a journal not normally covered by CIJE. "Oneshots" meet ERIC's selection criteria but are contrasted with articles from regularly-covered journals. Journals providing oneshot articles do not appear in the Source Journal Index (q.v.).

ONLINE

An "online" function is performed with the user in direct contact with the computer, interacting in real time. Contrasted to "offline," where the user submits the job into a queue to be run (and delivered) at some future date.

OPTICAL CHARACTER RECOGNITION (OCR)

The reading of printed characters by machine and the transfer of this information to magnetic tape, disk, or other form of machine storage. Many reading devices (called scanners) require that the characters be written in a standardized typeface, e.g., OCR-A.

ORYX PRESS

A commercial printer located in Phoenix, Arizona. Has been the CIJE and ERIC Thesaurus publisher since 1979. (See also CIJE Publisher).

OVERHEAD (ACCOUNTING)

Those real costs that cannot easily be attributed directly to specific elements of work and that must, therefore, be allocated equally across all tasks. Example: rent, lights, heat, etc. Overhead, General and Administrative Costs (G&A), and Fringe Benefit Costs are sometimes grouped under the heading of "Indirect Costs."

PAGINATION

In the ERIC environment, refers to the number stamping of each page (or part of a page) that will become a separate frame on the final microfiche. Performed according to filming constraints and not according to conventional library practice. The ERIC pagination number represents the number of microfiche frames required to record the document. Used together with the level information to programmatically generate an EDRS price code.

PAPER COPY (PC)

A paper reproduction in standard 8½" x 11" format of an original document. All Level 1 documents announced in RIE are available from EDRS in paper copy. (Formerly referred to as "Hard Copy.")

POLICY DISCLAIMER LABEL

A standard label which must appear on every document announced in ERIC at Level 1 or 2. Its purpose is to make it clear that ERIC collects documents from a variety of sources and that those documents do not necessarily reflect official NIE policy or position.

POST-COORDINATED TERM

A concept that is "put together" at retrieval time (i.e., post or after the indexing process) through the coordination of two or more separate terms. For example, the concept "Italian Speakers," which does not exist in the Thesaurus as a term per se, can be sought via the post-coordination of the two separate existing terms ITALIAN and NATIVE SPEAKERS.

POSTING

To record. A document accession number can be "posted" (i.e., recorded) on a list of similar numbers that have all been indexed by the same term. Accession numbers are, therefore, sometimes referred to as "postings."

PRE-COORDINATED TERM

An entry in a thesaurus or vocabulary that is made up of more than one word and that represents a complex concept consisting of two or more unit concepts. For example, the unit concepts "Teachers" and "Attitudes" can be pre-coordinated into the complex concept "Teacher Attitudes." Pre-coordination refers to the fact that the terms or concepts are already put together in the vocabulary, "pre-" the indexing or searching process. Pre-coordination is often justified on the basis of the prevalence of the complex concept in the given system.

PRICE CODE

A code assigned to an RIE accession that can be translated into its Paper Copy and Microfiche price if purchased from the ERIC Document Reproduction Service (EDRS), e.g., "PC01/MF01". An up-to-date translation table appears in every issue of RIE. By not putting actual prices in its database, ERIC avoids the need to update the entire backfile every time there is a price change.

PRINTOUT

A printed record produced by a computer. It may be in upper-case-only or in upper/lower case. The paper on which the printing is done may be of virtually any size up to and including the 11" x 15" standard size computer paper.

PRIORITY DOCUMENT

A document designated by Central ERIC as mandatory input. Usually a National Institute of Education or Department of Education report, but may be important for other reasons. Procedures call for rapid processing of PRIORITY documents into the next available issue of RIE. Usually all questions of copyright, clearance, or reproducibility are resolved before transmittal to the Clearinghouses, in order to expedite processing.

PROGRAM AREA CODE

A data element which attempted to code (two-character numeric code) documents by the legislation under which they were funded. Made inactive in 1982 due to the general lack of such information on documents.

PROJECT NUMBER

An identifying number assigned by an organization to a project. Not to be confused with a "Report Number" (which is assigned to a specific document, of which there may be several generated on a given project), or a Contract or Grant Number (which is an identification of the legal contractual instrument between two organizations). A valid ERIC data element for the period 1966-1981. Made inactive in 1982 due to infrequent usage in the literature.

PUBLIC DOMAIN

Unprotected by copyright or patent; belonging to the community at large; subject to appropriation by anyone.

PUBLICATION DATE

The calendar date that a written work is promulgated to its public. Usually considered to coincide with the date printed on the work and the date the work was printed, though in actuality there may be some variance between these.

PUBLICATION TYPE (PUBTYPE)

A data element intended to characterize the form of the document (e.g., journal article, dissertation, speech, etc.), as contrasted to its subject matter. Thirty-four (34) types are distinguished in the present ERIC scheme.

RDU

Research and Development Utilization, an NIE-supported project. Designed to assist some 200 schools to identify and use R&D-based resources to improve their programs in the areas of basic skills, career education, and inservice education.

READER-PRINTER

A device to read microfiche or microfilm that has the additional capability of producing enlarged paper copies of individual page frames.

RECALL

The number of documents/accessions retrieved in a search that are relevant to the original question, divided by the total relevant documents/accessions in the database/file searched. A ratio used as a measure of the extent to which the search detected all possible good "hits."

RELATED TERM (RT)

A Thesaurus cross-reference used to indicate any close conceptual relationship among Descriptors other than the direct class/subclass relationship described by Broader Terms and Narrower Terms. Related terms may be close in meaning, may have the same Broader Term, may be related in usage or application, may have a part-whole relationship, and so on. An RT's reciprocal is another RT.

RELEVANCE

The number of documents/acquisitions retrieved in a search that are relevant to the original question, divided by the total documents/acquisitions retrieved. A ratio used as a measure of the extent to which the output of a search is on target and contains solely good "hits." Synonymous with "precision".

In selection, the extent to which the document deals with issues that are current, "alive," and of contemporary interest to the educational community.

REMOVE LIST

A report listing all documents submitted by clearinghouses for RIE announcement but removed prior to publication. Reasons for removal may be: duplicate, author request, legibility problems, incomplete, lack of reproduction release, not within selection criteria, etc.

REPLY CARDS

Form responses attached by contributors to documents received by the Facility and the clearinghouses. They are returned to the contributors with information as to the disposition of the documents, including the ED number, if requested. Special cards have been developed for State Education Agencies (SEA's) and such groups as the National Diffusion Network (NDN).

REPORT NUMBER INDEX

An alphanumeric listing of all report numbers appearing in the Report Number field of documents announced in RIE.

REPRODUCIBILITY

See "Legibility" and "ERIC Document Reproducibility Guidelines."

REPRODUCTION RELEASE

A waiver or statement from a document author, source, or copyright holder giving permission to ERIC to reproduce the document. If both paper copy and microfiche reproductions may be made, the release is described as Level 1; if only microfiche may be made, the release is called Level 2. Reproduction releases are kept on file at the individual clearinghouses that obtain them.

RESOURCES IN EDUCATION (RIE)

A paperbound monthly (12 issues per year) abstract journal that announces documents dealing with all aspects of education, e.g., research reports, program descriptions, instructional materials, etc. Approximately 15,000 documents are announced annually. RIE consists of a resume section of document abstracts and index sections consisting of separate Subject, Author, Institution, and Publication Type indexes. Paperbound semiannual indexes are printed by GPO, which functions as the printer and subscription agent for RIE. An annual hardbound cumulation of both resumes and indexes is available from the CIJE publisher.

RESUMAST (RESUMAST MASTER FILE)

The ERIC computer system's name for the master magnetic tape file of resumes (ED and EJ accessions).

RESUME

A compressed document description including cataloging, indexing, and abstracting data; a surrogate for the document itself. The term resume is used for this concept within the ERIC system; other systems describe their basic record variously as an abstract, digest, precis, brief description, announcement, record, etc.

ROLE

An additional symbol (e.g., "9") attached to an index term (or to a document number being posted to an index term) to designate the functional sense in which it was used in a particular document. Roles are not currently employed in the ERIC Indexing System.

ROTATED DISPLAY

One of four arrangements or formats of the Thesaurus of ERIC Descriptors (the others being the Alphabetical Display, the Hierarchical Display, and the Descriptor Group Display). This display provides a permuted alphabetical index of all words that form Thesaurus terms, whether Descriptors or USE references. Each separate word is considered as a filing unit, and a term appears in as many locations in this display as it contains separate words.

SCATTERING

Refers to the "scattering" of indexing information caused by the use of variant word forms for the same concept. For example, use of both the terms "Performance Contracts" and "Performance Contracting" would scatter information better brought together under one preferred term.

SCOPE NOTE (SN)

A brief note explaining the intended usage of a Descriptor or Identifier. Used to restrict usage or to clarify concepts that may have alternative meanings. Not intended as formal definitions, Scope Notes indicate how terms are (or should be) used in indexing. Scope Notes appear in the main Alphabetical Displays of both the Thesaurus and the Identifier Authority List.

SCOPE OVERLAP LABEL

A label affixed by the ERIC Facility to a reproduced copy of the cover of a document when the document overlaps the areas of interest of two or more clearinghouses. This cover is then sent to the alternative clearinghouse(s) to alert them to the fact that a document of interest to them has been assigned to another clearinghouse.

SEARCH

A systematic attempt to identify documents with some well-defined characteristics. Applies to both manual and computer retrieval efforts.

SEARCH STRATEGY

The logic of a particular inquiry; the demands that a search makes on its potential output. A search strategy is usually exemplified by a series of index terms arranged in groups and interconnected by logical operators, e.g., (DRINKING) AND (ALCOHOLIC BEVERAGES). A record in a data set must meet the specifications of a search strategy in order to be an output of the search. Search strategies may be "tight" and geared for retrieval of a small number of highly relevant items, or they may be "loose" and geared for comprehensive output of anything that even touches on the subject.

SELECTION

The process by which documents and journal articles are selected for addition to the ERIC database and announcement in the monthly ERIC abstract journals. Selection is done on the basis of type of document, legibility, size, quality, redundancy, and other factors. The complete set of criteria used for selection are provided in the ERIC Processing Manual. (See also Evaluation).

SELECTIVE DISSEMINATION OF INFORMATION (SDI)

Alerting organizations or individuals to the existence of documents that deal with their areas of special interest. Usually based on a database or group of databases that are searched on a regular schedule conforming to their update schedule. The search for any one client/user is said to be based on a "profile" of that user.

SET

Any group of things having some characteristic in common, e.g., the set of documents issued by the National Bureau of Standards.

SINGLE FRAME RESUME (SFR)

A complete record of all data (cataloging, indexing, abstracting) collected for a document, printed on one page (i.e., frame). Usually a computer printout. The ERIC Facility provides EDRS with SFR's for each document to be filmed; these appear on the microfiche on the Page 1 frame preceding the cover or title page.

SITE VISIT

A visit to clearinghouses by Central ERIC personnel. At least one official site visit is made annually in connection with performance review and evaluation.

SIX-POINT TYPE

The smallest size type acceptable to ERIC for microfilming purposes.

SOFTWARE

In computer contexts, the program (or instructions to the machine) required in order for the computer to produce the desired results. Sometimes extended to include external operating procedures.

SOURCE CODE

A code representing an institution (e.g., a corporate source, a sponsoring agency, etc.). The ERIC Source Code is an 8-character alphanumeric code (3 alpha, 5 numeric). Information systems frequently make use of Source Codes because of the length of organizational names and the opportunities they provide to make small errors in spacing, punctuation, spelling, etc.

SOURCE DIRECTORY

An authority list of organizational/corporate/institutional names, citing the preferred form of each name. ERIC follows the COSATI guidelines in establishing organizational names.

SOURCE JOURNAL INDEX

A list of the journals covered by Current Index to Journals in Education (CIJE). Each journal is identified as to the clearinghouse responsible for it and as to whether it is covered comprehensively or selectively. Clearinghouses nominate additions to the list. The CIJE publisher maintains the list and prints it in each issue of CIJE.

SPECIAL CHARACTER

Any of the non-alphabetic, non-numeric characters used in a particular type font or printing device. Examples of special characters would be \$? ! # *. ERIC makes use of a total of 26 special characters.

SPONSORING AGENCY

The organization which sponsored (and paid for) the work reported in a given document. To be distinguished from the organization actually doing the work.

STANDING ORDER CUSTOMERS (SOCs)

Subscribers to the ERIC microfiche collection. Subscriptions are on an annual basis and cost around \$2,000 for some 14,500 titles (20,300 individual fiche cards), shipped to subscribers in monthly increments corresponding to the monthly issues of Resources in Education (RIE).

STANDING ORDERS

Subscriptions for all the publications (or relevant classes of publications) produced by a given source. EDRS sells standing orders to the ERIC microfiche.

STATE-OF-THE-ART PAPER/REVIEW

A synthesis and integration of the level of knowledge and expertise achieved by a particular scientific or technical activity, e.g., "the state-of-the-art in computer assisted-instruction." Summaries of this type are periodically necessary in many fields. A complete review of the literature on a subject is often an important part of the state-of-the-art study.

SUBJECT CATALOGING

See "Indexing."

SUBJECT HEADING

In traditional library practice, a member of a controlled vocabulary of alphabetic index terms. Subject Headings tend toward pre-coordination and may be made more specific by "dashed" subdivisions, e.g., World War II—History.

SUBROUTINE

A program designed to perform a well-defined, usually limited task and capable of being used as part of other programs when that task is required.

SYSTEMS ANALYSIS

The process of determining the objectives of a system and of defining the components, operations, and procedures by which it either achieves those objectives or could achieve them more efficiently. It thus involves four steps: (1) definition of objectives; (2) analysis of processes; (3) design of alternatives; (4) evaluation.

TERMINAL

A device for communication with a computer. Terminals physically close to the computer may be connected via direct cable. Terminals physically remote from the computer are connected via communications facilities.

THESAURUS

A collection of words or terms. In the fields of library/information science, the thesaurus is used to classify, index, store, and retrieve information in a data bank. Thesaurus terms serve as labels; they are keywords or elements that are descriptive of the text or data being indexed. Thesaurus terms may be listed alphabetically, or they may be structured into hierarchies, specialized fields, or other sub-areas. A list of thesaurus terms accompanied by reference citations becomes an index.

THESAURUS OF ERIC DESCRIPTORS

A publication containing the basic vocabulary used by the ERIC system for the indexing of documents and journal articles. It contains approximately 5,000 indexable Main Terms and over 3,000 nonindexable USE references and "dead" terms. Scope Notes (definitions) or parenthetical qualifiers are provided for all non-obvious terms. Hierarchical and other relationships among terms are indicated by the standard "Narrower Term," "Broader Term," "Related Term" notations. The Thesaurus is maintained and updated by the ERIC Facility, largely on the basis of inputs from the ERIC clearinghouses. It is published as an internal "working copy" by the ERIC Facility (usually annually) and commercially by the CIJF publisher (usually biennially).

TIMESHARING

The use of a device, especially a computer, for two or more tasks during the same time interval, by allocating small divisions of the total time to each task in turn.

TITLE CARDS

Cards prepared for all documents received at the Facility and considered "in process." The titles are transcribed exactly as they appear on the document. Personal and corporate authors, report numbers, publication date, sponsoring agencies, series notes, and other identifying data are also recorded. The Title File serves as a record of all material received by the Facility and is used to answer questions as to the disposition of documents.

TITLE INDEX

An alphabetical listing of the titles of all documents announced in RIE and its predecessor publications, together with the publication date, pagination, and ED numbers of each. Used for duplicate checking and reference work.

TRANSFER AND DELETE

The process by which index terms or organizational names in the ERIC database are deleted and their usages replaced by (transferred to) the preferred term. Example: all appearances of "Coherent Light" deleted and replaced by "Lasers."

TRUNCATION

Literally, foreshortening. Used with respect to data elements that exceed the permissible lengths and that must be made shorter in order to fit. Also used with respect to computer searching of free text during which a term that may have different endings is searched in its truncated form, e.g., "pneum" in order to retrieve all the different relevant word forms with one command.

UNIT COST

The cost of accomplishing or producing one unit of a pre-defined product, e.g., a reference response, a completed resume, a search, etc. A unit cost may be calculated in various ways, e.g., with management allocation or without, with occupancy (rent) or without, etc. When reporting unit costs, it is crucial to describe the assumptions and ground rules underlying the calculation, i.e., what categories of cost have been included in the final number?

UNITERMS

Single-word index terms. The theory behind Uniterm indexing assumes that during retrieval Uniterms can be combined (post-coordination) to reconstruct the original complex concepts found in the document. Uniterms are the opposite of pre-coordinated terms (q.v.).

UNIVERSITY MICROFILMS INTERNATIONAL (UMI)

An organization in the business for many years of providing bibliographic control and document delivery for dissertations produced by domestic academic institutions. Produces Dissertation Abstracts, among other publications. Currently a subsidiary of the Xerox Corporation.

USE REFERENCE

The USE reference indicates an equivalent relationship between terms in the Thesaurus (or the Identifier Authority List). It is used to refer an indexer or searcher from a nonusable (nonindexable) term to the preferred indexable term or terms. Its mandatory reciprocal cross-reference is the UF term. For example, the Thesaurus entry "Manpower, USE LABOR FORCE" necessitates the reciprocal UF MANPOWER under the entry LABOR FORCE.

USED FOR (UF) TERM

A "Used For" term indicates an equivalent relationship between terms in the Thesaurus (or the Identifier Authority List). The UF reference is a synonym or variant form of a Descriptor (or Identifier) and is not used in indexing or searching. Its mandatory reciprocal is the USE reference. For example, the Thesaurus shows FOLKLORE to be a UF under the entry for FOLK CULTURE; therefore, FOLK CULTURE is to be "used for" FOLKLORE.

USERS

Any persons who use the ERIC database, microfiche, publications, or component organizations to obtain assistance (e.g., searches, references, document copies, answers, microfiche, etc.) with their needs. ERIC users span the educational community and are made up of: teachers, administrators, researchers, counselors, school board members, policy/decisionmakers, students, parents, etc.

VENN DIAGRAM

A graphic method employing circles or ellipses to represent relations in logic between classes by the inclusion, exclusion, or intersection of these figures.

VIDEOCOMP

A high speed electronic typesetting device that takes data on formatted magnetic tapes and produces camera-ready pages on film or paper masters. The tape must carry the specifications as to type font, type size, leading, column width, running heads, justification, etc.

VOCABULARY DEVELOPMENT FORM (VDF)

The form provided for the submission of all Thesaurus changes, whether additions of new Descriptors, modifications of existing Descriptor displays, or Descriptor deletions (purges). All justification information is recorded on the form, including both authorities cited and personal contacts. Space is provided for indicating any RIE and CIJE postings changes that are necessary to keep the Thesaurus and postings files synchronous. The form was introduced in 1980 as part of the Vocabulary Development Program.

VOCABULARY DEVELOPMENT PROGRAM

Initiated in December 1980, this program represents an ongoing procedure for coordinating and implementing changes to the ERIC Thesaurus. All Thesaurus recommendations are reviewed by representatives from every Clearinghouse and several user organizations (see Vocabulary Review Group) before final dispositions are made.

VOCABULARY IMPROVEMENT PROJECT (VIP)

A comprehensive project conducted from 1977 to 1980 to strengthen and update the ERIC Thesaurus vocabulary. It culminated with updates of the RIE and CIJE master files to reflect all vocabulary changes, and the publication of a "completely revised" Thesaurus (8th edition). The project introduced an effective system of "total network involvement" in Thesaurus development (including participation by external users), ultimately evolving to the present-day Vocabulary Development Program.

VOCABULARY MAINTENANCE

The ERIC Facility Lexicographic staff, with the assistance of the network-wide Vocabulary Review Group, reviews all additions to the ERIC vocabulary (Descriptors and Identifiers), approving or denying each term. Scope Notes (definitions) and cross-reference structures are refined, if necessary. Additionally, suggestions for changes of existing terminology are reviewed for feasibility, advisability, impact, and compliance with the ERIC Processing Manual. ERIC encourages direct participation by all network components, including external users, in its vocabulary maintenance activities.

VOCABULARY REVIEW GROUP

A 24-member committee responsible to Central ERIC for the development and maintenance of the ERIC vocabulary. Its responsibilities are to review additions and changes to the ERIC Thesaurus, to evaluate vocabulary-related policy matters, and to recommend long-range alternatives for vocabulary development. Membership includes Central ERIC, the ERIC Facility, the ERIC Clearinghouses, the CIJE/Thesaurus Contractor, and several users from libraries and search centers. Originally established in 1973 with 36 members, the present group was organized in 1980 as an integral part of the Vocabulary Development Program.

VOCABULARY STATUS REPORT

A monthly report, prepared by ERIC Facility Lexicography, summarizing all recommended Thesaurus changes received during the preceding month. The report serves as the mechanism for alerting the Vocabulary Review Group to proposed changes and for soliciting the membership's comments and recommendations. An update of each report, with final dispositions noted, is redistributed to the review group.

VOICE

Used with reference to verb forms that indicate the relation between the subject and the action expressed by the verb. The "active voice" indicates that the subject is performing the action expressed by the verb, e.g., "John bought a book." The "passive voice" indicates that the subject is the object or recipient of the action expressed by the verb, e.g., "A book was bought by John."



PROCESSING MANUAL

Rules and Guidelines for the Acquisition, Selection,
and Technical Processing of Documents and Journal
Articles by the Various Components of the ERIC Network

INDEX

August 1982

EDUCATIONAL RESOURCES INFORMATION CENTER

National Institute of Education
U.S. Department of Education

ERIC PROCESSING MANUAL

INDEX

INTRODUCTION*

The ERIC Processing Manual consists of ten separate and distinct sections, each as independent as they could be made without unreasonable redundancy. Each section has its own detailed Table of Contents, which can be used to pinpoint relevant material. However, for any manual of this size and complexity, a comprehensive index is necessary to ensure efficient use.

The index provided here contains entries for subjects (e.g. Abstracts (Types of)), particular publications (e.g. State Information Book), particular forms (e.g. Scope Overlap Label), and particular organizations (e.g. UNESCO).

The entries in the index are referenced to Section Number (in Roman numerals) followed by the inclusive pagination within that section, e.g. VI-3-10 = Section Six, pages 3-10. In the case of Section VIII, which has a Part 1 and a Part 2, the entries appear as follows:

VIII-1-1-15 = Section Eight, Part One, Pages 1-15
VIII-2-1-15 = Section Eight, Part Two, Pages 1-15

When researching a particular point in the EPM, it is a good idea to use the Index and not to rely entirely on memory. Certain topics are covered at different locations from different points of view (e.g. Abbreviations (in Cataloging), Abbreviations (in the Abstract), Abbreviations (in Descriptors and Identifiers)), and only the Index will guide the user to all the statements on a particular subject.

*The index is comprehensive in that it encompasses all Sections published to date. The only Section not yet published (and therefore not in the Index) is Section 9 "Data Entry," which has deliberately been delayed due to the current shift in data entry methodology going on within ERIC. Section 9 will be issued sometime across the six months, after which this Index will be revised to incorporate its contents.

ERIC PROCESSING MANUAL

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